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THE
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A JOURNAL OF
MEDICAL, SURGICAL AND OBSTETRICAL
SCIENCE AND PRACTICE,
AND
PHILOSOPHICAL GAZETTE.

VOL. II.

JANUARY 4TH TO MARCH 29TH.

LONDON:

PUBLISHED BY THOMAS MARTIN, EAST TEMPLE CHAMBERS, WHITEFRIARS.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 1.

LONDON, SATURDAY, JANUARY 4, 1851.

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Quarterly Subscriptions, by pre-payment, Six Shillings. If by post-office order, the same to be made payable to *Thomas Martin*, at the General Post Office.

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The plans and estimates of the intended College will soon be published.



ORIGINAL COMMUNICATIONS.

ON PARALYSIS AGITANS.

BY ΣΙΓΜΑ.

PARALYSIS AGITANS is emphatically a disease of emotion. Emotion is its first and last cause; without emotion it would never be called into existence, or being once induced, it would never manifest itself. This at least is true, of its first phase; whether any physical lesion may supervene in its protracted course, remains a deeply interesting question. In one case, paralysis agitans arose from the irreparable loss of a bereaved wife. In another it was induced by the mortifications and vexations arising out of a disputed election. In its earlier stage, the peculiar symptom of this disease is seen, or most seen under every circumstance of emotion, but ceases whenever emotion ceases, or whenever this is superseded by an energetic act of volition, or by a firm act of resolution.

Alone, reposing, asleep, the agitation is absent. It is renewed when cause of emotion comes into operation. It frequently subsides in the society of the patient's immediate relatives or friends, as his wife and children, and is re-exerted on the appearance of a visitor, or stranger. It is especially apt to be renewed on the appearance of certain persons whose presence or conversation recall agitating ideas: in one case, the presence of the patient's keeper, agent, or physician, had the most marked effect in inducing the agitation and shaking, the conversation with those persons being the most attended by emotion.

I have said that the shaking is subdued by a fresh act of volition. If the patient firmly extends the arm and hand, and firmly retains it in its new position, all shaking ceases; but the agitation returns as the force and firmness of the volition subsides, and the patient, with less firmness and volition, draws back his hand.

The agitation ceases too for a short time, if by firmness of purpose the hand is allowed to pass on to inaction,—to fall on the knee, for example.

The symptom subsides, in a word, when its cause, emotion, is superseded by another and an energetic idea.

But we live, unconsciously almost (and infinitely more than is generally supposed), a life of emotion. Every moment brings its agitating thought, every day brings its anxious care. But in the disease in question, there is by original temperament, and in induced morbid excitability, augmented susceptibility to its influence; and events, which, in health, induced no manifestation of their power, become obvious in their peculiar effects on the nervous and muscular systems.

The peculiar shaking, and the equally peculiar powerlessness; or shall I call it paralysis, cease on giving confidence to the patient. I may here adduce an anecdote:—A gentleman, a magistrate, confined to his chair by paralysis agitans, wished to consult a legal book. He asked for it, and his servant gave it to him, as he supposed. On opening it, he found it the wrong book. In his anger he rose from his chair, and reached it himself. Surprised at discovering his power of walking, he endeavoured to repeat the experiment, and, remembering that before he had risen from his chair, he had rather violently closed his book, he repeated this manœuvre, and ever since, on doing this—but only on doing this—he regains his power of walking.

One patient could walk whenever he pleased, with the tips of his fingers even merely on his wife's arm, but not otherwise.

All the movements of the patient afflicted with paralysis agitans are quick and energetic; his walk becomes a run: his power consists in an *energetic* volition.

It is essential to replace an (unfounded?) conviction in the patient's mind, that he is powerless, by another, viz., that he really possesses power, the circumstances being changed. The prepossession—the depressing emotion must be removed, and replaced by an emotion of the opposite kind.

In speaking of emotion as the cause of paralysis agitans, we ought to notice that this emotion is of the painful and agitating kind, and not unallied to fear and vexation. The elevating emotions or mental states, as hope, confidence, energy, have a marked beneficial effect. The movements made with firmness and resolution are always least attended by agitation.

There is, in consequence, a disposition in this malady, to rapid movement. The patient is apt to *run* instead of walking deliberately. An energetic volition overcomes the influence of emotion; volition of less energy is more or less defeated by emotion in its turn.

At first the head and the arm or arms are most affected; afterwards other parts and limbs are involved in this dire malady. At length the power of the lips in articulation, of the fingers in

writing, in dressing and undressing, and in using the knife and fork, of the muscles which support the head, of the pharynx, of the rectum, of the sphincters, &c., becomes diminished. At length, too, there is agitation during sleep, which is apt to be disturbed by the movements. Or it may be, that disturbed sleep or dreams—the emotion of sleep—may add to the agitation of the head or limbs, which may, in its turn, interrupt the sleep.

The extraordinary fact in regard to paralysis agitans is, that though it consists in undue excitability of the spinal centre, this undue susceptibility, as it is caused, so it is affected by emotion and emotion only. This susceptibility does not extend to the centre of the diastaltic actions. In this respect, as in its chronic character, it differs from tetanus, whilst it agrees, though not in its causes, with chorea.

It is singular that emotion being the cause, the seat of the emotion, the seat of the disease, the heart and other organs so constantly under the influence of emotion, is not more affected.

The paralysis agitans has hitherto made an exceedingly slow, but not the less fatal, progress.

Unfortunately, we possess no *post-mortem* examinations of this disease. I suspect no morbid lesion would be detected. No such lesion, hitherto known, would lead to the peculiar phenomena of this malady, except towards its close, when a sort of general paralysis takes place, which may be the effect of effusion and consequent pressure. I ought not to pass by unnoticed the 'Essay on the Shaking Palsy,' published in 1817. Mr. Parkinson seems to have had no idea of the real cause of this disease. He made no *post-mortem*, and the case of Count de Lordat, in which a *post-mortem* was made, was a case of accident, and not of shaking palsy; the patient "was as capable as ever of writing, and, indeed, presented no pathognomonic symptoms of that disease." Still Mr. Parkinson's Essay is one of great merit and originality.

As emotion is the original and the continued cause of this trying malady, an important question arises,—What would be the effect of a sustained removal of all sources of emotions, if, and when this may be possible?

As in cases of undue susceptibility to light, we place the patient in a room, from which every beam of light is excluded, why should we not remove the patient afflicted with paralysis agitans from every source of emotion—and this for a sufficient time to allow undue excitability to subside, and to give a sufficient opportunity for the administration of remedies?

Seclusion in a cottage, a judicious companion, books of quiet interest; repose in the nearly recumbent position (the head especially being supported), free exposure to the open air, the gentlest exercises, the farm, the fields, the garden—the plants, the corn, the cattle, the poultry (not his own). It becomes an important question also whether the shower bath, the douche along the spine, &c., &c., may be useful; various sedative or narcotic medicines long given to subdue emotions, as we would give them to subdue pain, in stated forms and doses, regularly and systematically.

The bi-chloride of mercury, quinine, strychnine, &c., should be put to a cautious trial by competent judges.

ON BELLADONNA AS A REMEDY IN SCARLET FEVER.

By JOHN GARDNER, M.D., F.C.S.

AN apology would seem to be needed *in limine* for venturing to publish any remarks, however brief, and with whatever tendency, upon a subject so hacknied as that of the employment of belladonna against scarlet fever. But a single word will, I trust, be sufficient to serve for my apology, namely, that hitherto the discussion respecting the use of belladonna, has had reference only to its powers as a prophylactic; if it has ever been fairly tried as a remedy for the disease when once established, I am not aware that the results are anywhere recorded; if I am mistaken upon this point, I still trust that the following statement will be received without prejudice, since it is certainly of no small importance to extend the inquiry to as wide a sphere as possible, as to the exact value of an alleged remedy for so formidable a disease.

The use of belladonna as a prophylactic against scarlet fever, is said to have originated with Hahnemann, who, having read in Cullen's 'Materia Medica,' that the exhibition of belladonna sometimes gave rise to a sense of constriction in the throat, and an erythematous rash, conceived the idea, in accordance with the old and absurd maxim of *similia similibus curantur*, of employing it to protect from the influences of the contagion persons necessarily exposed to it.

If this were true, which, however, I shall presently show

I have reason to doubt, we should be almost justified in rejecting any statement without further inquiry from a person who is weak enough to avow that he could shape his conduct upon such frivolous principles, or be guided by such loose and vague analogies in a pretended pursuit of science. The statement, however, that belladonna is an efficient prophylactic against scarlet fever, suspicious as it was from such a source, was not rejected by the profession without a fair and full investigation. In France, in Germany, and in this country, very numerous experiments have been made, and these have been devised with ingenuity and recorded with candour, but with very various results. It would occupy too much time to go into the details of these experiments; it must suffice to observe that, on the one hand, Messrs. Merat and De Lens, in their admirable 'Dictionnaire Universel de Matière Médicale et de Therapeutique Générale,' in summing up the evidence from the many witnesses scattered throughout the journals, decide that the efficacy of belladonna as a prophylactic against scarlet fever is established. On the other hand, Dr. Pereira (in 1842) states that, in his opinion, the evidence hitherto adduced in favour of the notion is inconclusive; whilst the facts which can be adduced against the prophylactic power of belladonna are positive. For, he observes, twenty cases of failure are more conclusive against, than a thousand of non-occurrence of the disease after the administration of belladonna are in favour of it.

No one will dispute that unless under very specially favourable circumstances, there are so many difficulties attendant upon the administration of medicines to persons in health, to obviate a very doubtful and contingent danger, that it is almost impossible to come to any satisfactory conclusion, as to any alleged prophylactic powers of any remedy. The pretension, therefore, of Hahnemann, whether we regard its alleged origin, or its obvious purpose, is precisely of that vague and undeterminable character which well suits a system like that he had the discredit of originating, and which I believe to be compounded of ignorance and fraud.

I may just observe, before dismissing this point, that the mode of administering the belladonna adopted by Hahnemann and his followers, is based upon equally frivolous and unscientific principles. They dissolve a grain of extract of belladonna in an ounce of some menstruum (in a mixture of spirits of wine and water usually), and they administer this solution to children according to their age, one drop for every year.

One seems to need an apology for the repetition of this non-sense; it is, indeed, unworthy of a word in refutation.

In the course of many years' experience, I have had many times reason to feel deeply the want of a remedy against scarlet fever. It will, I suppose, be admitted by all that this disease is the result of a specific poison, and that the general principles of treatment as applicable to other fevers, whether arising from aerial poisons or other causes often disappoint us in scarlet fever. During the prevalence of the epidemic at certain seasons a more malignant character seems impressed on the disease. Our best means fail, and our patients die apparently wholly unaffected by our treatment. Such at least has been my experience. I have seen whole families thus swept off, in spite of every effort and the united counsels of many practitioners. It must be within the recollection of many, how many medical men at the west end of London, within a few years, have suffered in their families from this disease. Certainly in these cases the immediate application of the best means of treatment in use must be presumed.

A strong conviction of the contagiousness of the disease has usually been entertained in such instances, whether well or ill founded it is not my present purpose to discuss. It has lately been broadly stated, that the condition attaching to certain cases and groups of cases, designated "malignancy," and concerning the pathological nature of which so much difference of opinion prevails, is always dependent upon local external causes, deficient drainage, putrescent effluvia, and the like. I would just observe, that, unless such a doctrine can be supported by incontrovertible evidence, it was somewhat hazardous in the Registrar-General to put it forward so dogmatically as he recently has done. At any rate, I trust that the facts upon which the statement is based, will be fully and fairly investigated. The daughter of a distinguished foreigner lately died of malignant scarlet fever, in Carlton-gardens. Is Chevalier Bunsen's residence pervaded by putrid effluvia? Can we suppose it possible that the professional men above alluded to, lived in an atmosphere of filth?

I venture to throw out these hints, because I cannot believe that "malignancy" in scarlet fever, or other diseases, depends upon external causes at present assignable.

About three years ago, my attention was again forcibly drawn to scarlet fever. Some cases of great severity presented themselves in my practice, and I felt deeply the want of some agent

upon which I could more safely rely than the general means of treatment we all so well know. Unwilling to place the slightest reliance upon such a person as Hahnemann, I just glanced over some writers on the belladonna. I found that, formerly, before experimental therapeutics had been subjected to the ordeal of systematisers, this plant was said to be a powerful remedy against malignant erysipelas. I would just remark here, in passing, that the virtues of many vegetable bodies, well known to the more ancient practitioners, have been temporarily forgotten, because they would not fall into any place in favourite systems. In my opinion, we have not yet attained to the point in physiology and pathology, which renders any arrangement of remedies other than an alphabetical one, either advisable or safe.

The power of belladonna in the treatment of malignant erysipelas is recorded by *Dioscorides*, and, of course, the statement has been so often repeated, that I do not doubt the analogy of the two diseases must have led many men to employ it against scarlet fever. Perhaps Hahnemann found some observation to this effect in an old writer. I have not time to look up this literary question, but I would commend it to some one who has leisure.

At any rate, the analogy of scarlet fever in its malignant form with erysipelas, together with our knowledge of the powerful and peculiar influence of belladonna on the nervous system, render it worthy of a full and fair trial. Accordingly, I proceeded to try it, giving it in efficient doses, and taking care that the preparation I administered was in a proper state. The latter precaution is at all times necessary, because, while the extract, if properly prepared and preserved, is highly efficient, it is often found in the shops, either from being badly prepared originally, or from long keeping, wholly inert, so that half an ounce has been given for a dose without any effect. Happily, we have a very excellent and easily applied test for the activity of the extract of belladonna; a grain or two rubbed on the eyelids should, in a minute or two, produce full dilatation of the pupil.

In all my cases up to the present time, I have used extract of belladonna, which was prepared at Apothecaries' Hall, some four or five years old, but it acts immediately on the pupil whether applied externally or taken into the stomach.

Without reckoning slight cases of scarlet fever and sore throat, I have treated upwards of thirty cases with symptoms more or less grave, by means of the belladonna. In very many of these I should formerly have entertained no hope of seeing the patient pass through the attack, the approach of the disease being marked by a malignant aspect. I need not enumerate the peculiar symptoms which characterize fatal scarlet fever—these are well known to every practitioner. In the absence of the belladonna, I have watched with great anxiety these fatal tokens; they allow little room for our anticipations being negated. But with the belladonna I have not yet met with a fatal case.

Moreover, it is well known that in no inconsiderable proportion of cases, whether severe or slight, very inconvenient sequelæ occur on the subsidence of the fever, arthritic pains, oedema of the extremities, anasarca, and even hydrocephalus. In no case treated with belladonna have I met with such sequelæ.

I administer the belladonna according to the ability of the patient to bear it, in doses of half a grain to a whole grain every three, four, or six hours, dissolved in water; the dilatation of the pupil and the amount of stupor produced, being the basis of discrimination. I do not allow low delirium even from the first, nor indeed any other symptom, to deter me from giving belladonna, but I give no other medicine whatever, except an occasional dose of castor oil to secure a daily action of the bowels.

There is, of course, no objection to the concurrent use of other items of treatment, removal of the hair, cold affusion over the head, and sponging the limbs and body if it can be borne, gargles of the chlorides or mineral acids, &c.; but I depend little on any of these.

The diet I have usually recommended has been bread and milk, never depending upon mere farinaceous foods, so as to withdraw all, or most of the nitrogenous principles from the food, a practice I believe to be fraught with danger.

Making every allowance for the many sources of fallacy necessarily incident to the uses of a remedy under the circumstances of this example, I know nothing in the whole compass of medicine in which I have more confidence. I have recommended this plan of treating scarlet fever to several friends, and their reports of its effects have been uniformly favourable.

It would be out of place here to enter upon speculations as to the *modus operandi* of the belladonna, or any other collateral topic relative to the disease; my present object being simply to state the results of my own experience of the power of belladonna, and to request, on the one hand, any of my readers who may

have fallen on the same plan to publish the results they have observed; or on the other, to recommend the trial to those who have not hitherto employed it, without regarding the folly of the homœopathsists.

In conclusion, I would suggest that to obviate the uncertainty necessarily attendant upon the use of the extract of belladonna, the alkaloid atropine, or some of its salts, should be tried. The sulphate of atropine is, perhaps, the best. It is soluble in water, stable, and in every way manageable. I have not, however, at present prescribed this salt.

51, Mortimer-street.

LEAVES FROM THE DIARY OF A PARISH DOCTOR.

BY THEOPHILUS PROBE, ESQ.

(*The Old Soldier.*)

NO. VI.

WE have endeavoured, in a former number, to exhibit some of the evils of the workhouse system, under the New Poor Law. We have shown that separation and confinement for the crime of poverty, is incompatible with our English habits and our English notions; and that the best feelings of the human heart are outraged in carrying out the principles upon which the law is based.

We complain not of any abridgment of common necessities to the inmates, although we despise the false economy of gauging the human stomach, and believe there is more waste in weighing out given portions to the poor, than by following the law of nature, and giving what the appetite requires; for if some eat largely, others eat more sparingly, and thus the consumption is equal.

We have ourselves observed a great waste in this matter. The authorities, we know, have other modes whereby the refuse is made available; but one deprecates the necessity of such nauseating practices. It is, however, the moral evils which result from the system to which we shall devote this paper, and more especially on that part of it, where able-bodied labourers are thrust into a workhouse during the dearth of labour; and here the evil is so grievous, that we call upon our government to institute a paternal inquiry into the matter, that the peasantry may not become demoralized, and their spirits urged by necessity into crime. Let the state remember, out of these grow our armies; and from this source spring our domestic servants, and that on their moral integrity and physical strength depends in no small degree, a nation's prosperity, and a nation's might.

Our friend, the Old Soldier, whose *animus* we excited on a former occasion, by venturing a word in commendation of the bastille, as he called it, is not a bad authority in these matters; although we are bound to admit he had strong prejudices, and was too intense in his hatred of the new law to be impartial in his views of it. As his statements are, however, the gatherings of his experience, and as they are all true to the letter, we cannot do wrong in quoting them. The old man had retired from the army on a small pension—enough, perhaps, to meet his ordinary and common wants; but he had an aversion to an idle life, and as his mutilated limb rendered him worthless as a labourer, he became a kind of travelling pedlar, going from village to village with his basket of cotton balls, oranges, and cakes, and trifling articles of hardware. This vocation, and his own kindly disposition, rendered him a welcome visitor amongst the poor; he was well known for many miles round his own locality, and never failed to elicit as much hospitality as he needed. The opportunities which this freemasonry afforded, furnished him with an infinite fund of information respecting the habits and feelings of the English peasantry, and no doubt impressed his mind with many peculiarities of thought, only to be obtained from such sources. He was, moreover, a shrewd, clever man, and a capital observer of character. Education, according to the common acceptance of the term, he had none; but, nevertheless, he was educated, and saw far deeper into many matters and many things, than even the most learned do. Of abstract theories he knew nothing, but of practical inferences his views and his opinions were worth treasuring. In short, he had studied human nature; that is, the knowledge of it had come to him intuitively, and his commerce with mankind had been such, that few men, abating his prejudices, had more extended views of the evils—at all events, by which he was surrounded, and very few, indeed, saw more clearly into the remedies for them, although he knew himself to be powerless in bringing

those remedies into action. His mode of expression was forcible and energetic, with now and then a touch of the pathetic, which had the power of forcing tears, for all felt that what he said came from the heart; and all men will admit that what comes from the heart, generally goes there, however indifferently it may be expressed.

Some five or six years after our first colloquy by the walls of the New Union House, the poor veteran was seized with a lingering disorder which ultimately terminated in his death. We attended him throughout this lengthened illness, and on referring to our diary, we find several entries of conversations which appeared to us at the time worthy of record. It may appear to many, an absurd thing to treasure the garrulity of such a man as this; but our opinion is, that if we knew more of what the poor thought, and what the poor felt, we should have better data for our enactments, and be less liable to failure. What can our legislators know, who have no practical knowledge of the character and condition of those for whom they legislate? They may take a commissioner's report, but if they gain their intelligence from a corrupted source, of what value is it? No man can sit by his fire-side and fancy privation and suffering: he is surrounded with luxury, and is hardened in his feelings to those who know not what luxury is. It would be difficult to convince such a man that there are beings in this wide world, who would be thankful to partake of the common refuse from his table, which his servants have cast on the dunghill; and yet, such is a true—a damning fact! Our opportunities of witnessing distress and abject wretchedness, have shown us examples without end. We collate from our diary the following conversations with the Old Soldier on the moral evils of the New Poor Law.

"Well, Sir," said he, "you have had a good deal to do with the New Bastille since you talked so finely about it, when it was a building—how do you find it?"

"Why, John," we replied, "we find the inmates very clean and comfortable; better, certainly, as far as outward appearances go, than they were formerly."

"More happy, Sir?"

"That we cannot say."

"I can though: they are wretched, Sir, and long for their freedom, like birds in a cage. Bless you, Sir! I have seen them when they've come out, and they don't know how to contain themselves for joy, although, perhaps, they had not a crust to eat. But that isn't all; there is a blighting curse falls upon them—a devil-may-care spirit—a poison that goes into their very minds; and after they have once been there, they never care about their characters."

"Indeed!"

"Aye, indeed! You may think I tell untruths—you may think I rub it up too fine," said he, smiling; "but I assure you, Doctor, I have seen some sad results by confining strong useful men in that workhouse. I don't mean to say they are taught evil there—God forbid! but I mean to say they lose self-respect, and that's the beginning of bad courses. You knew Jack Thompson, didn't you, Doctor?"

"What, the man that was transported last year?"

"The very same. Now, I knew that man when he was as good a labourer as any in the parish where he lived, and as honest too. Poor fellow! he married very young, and soon got a large family; but he whistled his cares off, for he had constant work; his wife was a tidy, pretty little creature, and his children were always neat and clean. Unluckily, however, he offended his master. I never could hear the rights of that matter; whatever it was, his master took a deadly hate to him. Well, he tried other farmers. No; they did not want him. He went miles and miles after work, but it was of no use. He returned almost broken-hearted, and then he found nearly all his wearing-apparel and other moveable goods pawned, to find his poor children and his wife in bread. He had suffered, himself, innumerable hardships, and was once or twice obliged to beg. He applied at last to the relieving-officer, and received an order into the house. He knew it was no use cherishing his pride; he swallowed the bitter pill, but bitter enough it was. He and his whole family staid in the house the whole winter, and when he came out he was as weak as a robin. He had not wanted food, he said—no, he had no complaints to make about that; but he wanted fresh air and freedom, and to feel that he was earning what he eat by the sweat of his own brow. His poor wife was as bad as himself; but she had been tried—sadly tried, for they had lost two children of the measles, and they knew the children would not have died if they could have had pure air; but the bed-room where they lay was crammed with other people, and it was close to a foul water-closet. Well, Jack got a little work now and then in the summer, when all the farmers were crying

out for hands; but the winter came, and then no more work. He applied to the relieving-officer again, and, with tears in his eyes, implored a little out-door relief—if it was ever so little—so that his children might not starve. The officer was a good-hearted fellow, and really felt for the man; but he had no power, he said, and again offered him the house.—‘No!’ said Jack, uttering a fearful oath, ‘I’ll die first!’ Do you wonder, Sir, that men under such circumstances, should grow desperate? Do you wonder they should steal? Do you wonder they should nourish deep, and dark, and terrible passions? Talk of principle, indeed! What principle can hold out against the heart-rending appeals of innocent children crying for bread? Heaven and earth! is it to be borne? Kind, good, Sunday-school teachers may urge God’s commandment—‘Thou shalt not steal!’ and spend much time in explaining the consequences, to their little scholars, of violating that law; but they should also remember the Saviour’s prayer—‘Lead us not into temptation!’ What is to be expected—what can be expected—of poor human nature when thus pressed? The man who has a fire-proof coat may walk through flames unhurt; but what becomes of the naked—the unprotected? You know what I mean, Sir; it cannot be expected that the ignorant can put on the armour of the wise. But I need not make a long story of it. Jack began by poaching; he was found out and sent to prison: that didn’t mend him; he came back worse than ever, and declared he preferred the prison to the workhouse. Oh! it’s a sad state of things when the feelings are blunted like that, when shame has no influence on the human heart, and the pride of honesty is lost—lost for ever. Again and again he was caught. No matter, his children were fed whilst he was away, and he himself was well enough off.

“Step by step he fell deeper and deeper into the mire of that sin which has destroyed so many. He was found guilty of sheep-stealing. Alas! that it should have been so. He was transported for life; there had been so many convictions, that he must be pronounced an incorrigible offender. But, Doctor, Doctor! he had been an honest man even now if he could have obtained work.”

On another occasion when we visited the old man, we observed a good-looking young girl about eighteen years of age, preparing some mutton-broth for his dinner. There was an air of flippant jauntiness about her which we did not like. Our scrutiny had attracted the old soldier’s notice, and he gave us a knowing nod, expressive of his understanding our own thoughts. When the girl was gone, he said, “There is another example of the effects of your beautiful new law.”

“How is that?” we replied.

“Don’t you know the girl?” said he.

“No.”

“Why, she is Widow Clarke’s daughter. The old woman does my little household affairs; she gets a few pence for it, and she is thankful enough for that. To-day she is unwell, and so she has sent her daughter. Under the old law the overseer allowed the poor widow half-a-crown a-week, and with this and her little earnings, she could find food for herself and child; and, indeed, she brought the girl up tidily, gave her as much learning as she could, and sent her regularly to church.

“When the New Poor Law came into operation, she was told that no widow in health would be allowed anything who had only one child; besides which, they thought it a great shame she should ask for relief, as her girl was old enough to earn her own living. The child was ten years old, and there was a time when the widow and the girl might have earned enough to do what the Board said they could. But bless you, Doctor! you know as well as I do that those times are gone by. In vain the poor woman persisted that she could do no such thing; work from early morning to late night, they could not between them get more than three or four shillings; and there was rent, and firing, and candles, to say nothing of washing and clothing. Many and many a time have I known those poor people without a morsel of food in the house, and no getting any either until the bit of work they were doing was sold. The child was sent out to beg, and now and then she would return with a few bones, a scrap or two of mouldy bread—the refuse, indeed, ‘which fell from the rich man’s table.’ But this could not last; in time the appeals were a nuisance. In small towns, you know, Doctor, people soon become familiar with the face of beggars, and then the heart is closed, however cogent and true may be the statement. Nor do I blame them, for begging is an abomination in any land.

“You need not wonder how this dreadful condition of things ended. The child grew to comparative womanhood;—she was not without attractions, though clothed in rags;—she was not without associates, but they, too, were outcasts and beggars;—she was not without temptation, and what barrier had she to oppose to the subtlety of sin? Alas! she was lost to virtue before she was fifteen.

See her now; her body is the temple of uncleanness; but there is a deeper, a darker, a fouler leprosy encrusts her soul. Oh, God!” cried he, dropping his head upon his pillow, ‘if thou has mercy in store for sinners, have mercy on such as these!’”

There was something so truly touching in this sudden burst of feeling, that for a moment we felt choked with emotion, while tears rolled down the cheeks of the old man in torrents. We saw the end of this poor girl—she sunk, from disease and dissipation, before she was twenty.

Our last recorded conversation with the old veteran had reference to the then disturbed state of the country. The workhouses were crammed with agricultural labourers and their families; discontent prevailed generally; and, to add to the horrors of the times, an apparently organized system of firing agricultural produce prevailed throughout the land. The old soldier, with that rankling hatred to the New Poor Law which had almost become a passion, failed not to trace to its rigid enactments a cause for all these evils.

“You have seen,” said he, “a good deal of the poor, Sir, while doctoring them when sick, but not half so much as I have. They won’t let out before you, because you are higher, like; but they look upon me as one of them, and I know the bitter spirit which stirs them up. I could tell you a great deal of what I think makes distress; but I dare say you think otherwise, so I won’t say anything about it; but is it true, Sir, there was another fire last night?”

“Indeed there was, and a fearful one, too! Nine stacks of corn were all burnt to the ground.”

“Gracious me! what do the poor fools mean? That won’t mend things, at any rate. But bless you, Doctor! you have no notion how ignorant the poor men are; they think, when they have burnt a farmer’s stacks, that they are injuring him, forgetting that it is only the insurance companies that suffer. I tried once to convince a fellow, who really was an evil man. I knew well he meant revenge, for the guardian of the parish, in an unguarded moment, called him an idle blackguard. He might be the latter, but he was not the former. Well, I saw by his fierce eye, and his clenched teeth, that he meant something, and naturally enough, I think, as the times went, thought of fire. I talked to him for an hour on the great crime he would commit, if he did so; of innocent lives which might be lost; of the sin of consuming the good grain which was given by our Heavenly Father for the use of His creatures—for him, for his children, and for others. But I did not move him a bit. Then I told him, after all, it would be no revenge, for the farmer would not be injured. What do you think the hardened villain said? ‘Not injured! I know better. Even if he’s paid for his grain, where is he to get his manure from next year?’

“Doctor, I moved off, shocked, horribly shocked, at the demoralizing change which had come over the people, and at the mean and dastard spirit which seemed to cling to the labouring population, making them so unlike the ‘bold peasantry’ I once knew them.”

(To be continued.)

DR. RADEMACHER'S THEORY AND PRACTICE.

BY DR. D'ALQUEN.

(Continued from page 225.)

THE morbus stationarius extends probably over a great part of the country, while the morbus intercurrens is in general confined to a single town, village, or what is very curious, to a single farm; it may appear at several places simultaneously, or successively, and in the latter case, leap over the immediate neighbourhood to more distant places. The morbus intercurrens, which appears in different localities at the same time, is mostly of the same nature. If a morbus intercurrens has an epidemic character, so that a great number of persons become affected, the morbus stationarius seems to have vanished. This is, however, but seemingly so; because, if you go in the neighbouring town, or village, which has remained free from the epidemic, you find the morbus stationarius to be there still the same. It seems to me what has been stated deserves particular attention in another point of view, as we can thus account for the apparently contradictory statements of one and the same remedy. How often have I given the oxy-sulphuret of antimony in coughs, and catarrhal affections of the bronchia, with the most surprising effect, and yet how many cases occur where it proves quite useless! It is then an erroneous conclusion to suppose that, because a certain remedy has in this instance cured a case of cholera, it must therefore cure the same affection at any other or at all times; of course it may, but this follows not as a matter of course, though it may cure nearly all cases which

were concomitant with the one in which it had effected a cure, as occurring under the influence of the same epidemic constitution.

The nosological form under which diseases appear is also of great practical value, since it is important to know if a single organ, and which, is primarily affected, or if we have a primary affection of the whole organism, or a combination of the two, one being secondary to the other. But this knowledge must not be confounded with the knowledge of the nature of the disease itself: of the latter, generally speaking, we know next to nothing, neither do we know anything more of life itself; but as medical men speak of the nature of the diseases, and say that it is impossible to cure them without that knowledge, we must ascertain in what *that* knowledge consists. In order to understand this rightly, we will put another question: What do chemists know of those bodies which they call simple or elementary? Such, of which at present they cannot prove their composition? All we know of them, is the knowledge of their relation to other bodies. Now, if we are precluded from knowing more of the nature of things we see and feel, it would, indeed, be arrogance to pretend to a knowledge of the nature of disease,—of this invisible something which has disturbed the flow of that likewise incomprehensible and invisible something which we call life. We cannot know anything of the nature of diseases beyond the observation of their bearing to the surrounding world; how far external influences which, either accidentally or purposely, have been brought in contact with our animal economy, act beneficially or otherwise. The knowledge with what remedy a disease may be cured is, therefore, the only knowledge we can have of its nature; in other words, to find out the nature of a disease, is to find the remedy by which it is curable; and *all* diseases remain unknown to our understanding until we have found the appropriate remedy to combat them. Under such circumstances, if we will ascertain the nature of a disease, there is nothing left us but to test it by different remedies, in the same way as the chemist applies his tests in analysing unknown bodies. No doubt, many will look with contempt upon this seemingly crude empiricism, but let us ask, how do these empirico-rationalists proceed? To-day they make this indication, to-morrow another; to-day they give this medicine, to-morrow another; and so it goes on in constant change until the patient is either killed or cured. They are reduced to the same necessity of making experiments; but there is still this difference, that they make their indications and prescribe according to speculative nosological doctrines and imaginary categories, while the followers of this system choose their remedies agreeably to their *positive ascertained* effects. They never experience a disappointment; knowing that the nature of a disease can only be ascertained by tests, the diagnosis being carefully made out, they make no scientific plans, they are exactly in the same position as the chemist—they apply their tests. In choosing a remedy, they are led just as the chemist forms an opinion of the probable nature of the object for analysing, from the observation of its external appearance, &c.—by all those circumstances which may justly influence us in making a choice of a remedy in a given case. It would be out of place here to enter into details, my chief object being simply to direct attention to the labours and practical experience of a man whose character for honesty, zeal, and ability in his profession, is rarely equalled. I may also add, that a *charité* has been established at Berlin, the patients of which are exclusively treated on Dr. Rademacher's principles, which daily gain more ground, in spite of the opposition from the doctrinaires of the day.

(To be continued.)

CORRESPONDENCE.

To the Editor of 'The Institute.'

SIR,—In reply to Dr. Sutor's letter in 'THE INSTITUTE' of last week, allow me to express my regret if any remarks of mine in the article to which he alludes, "On the Value of the English Spas," should have given him any just ground of umbrage; so far from wishing to convey any such feeling, I consider myself under much obligation to that gentleman for his able elucidation of the merits of the German medicinal springs.

I also cordially acquiesce in the force of his observation, that the more interest excited on the subject of the foreign, the more likely is attention to be drawn to the value of the English spas, a subject which appears to have taken a very serious retrograde movement, so far as the spas of Leamington are concerned; not that this has arisen from any depreciation in the qualities of the waters, or even from the caprice of fashion, but mainly attributable to the syste-

matic decrying of their use in the treatment of disease—a fallacy which Dr. Sutor's writings will doubtless greatly tend to dispel.

I perceive the mistake I have fallen into in quoting from memory Dr. Sutor's expression regarding the source of embarrassment of medical men; but I am quite at a loss to conceive, with either version of the quotation, how any such feeling as he has implied could, with any sense of propriety, be arrogated; at least, such was foreign from my intention.

Trusting that this explanation will be satisfactory,

I have the honour to be, Sir, yours faithfully,
PATRICK BROWN.

Eastnor Villa,
Royal Leamington Spa, Dec. 23rd, 1850.

To the Editor of 'The Institute.'

MEDICAL EXAMINATIONS AND GRANTING DEGREES.

SIR,—Permit me to occupy a small space in your valuable Journal, to place before our medical fraternity, for their dispassionate discussion, a few plain but important questions and observations; trusting that the subject will elicit that attention which is due to it.

I should like to know, Mr. Editor, wherein consists the difference in the grade and status of the surgeon-apothecary (or as he is familiarly termed, the general practitioner) and the physician, in their relative practical duties? Have they not the same object to obtain—to get the patient well as soon as possible? and are not the means alike available in the hands of the one as of the other? Is there any distinction in the amount and course of the curriculum of their classical, literary, and professional education?—does the Apothecaries' Hall give its licence for the candidate to treat only the simple, minor, and less important diseases of the *plebeian*? and does the University bestow its degree, for the M.D., to take charge of the higher and more vital, complicated, and abstruse complaints of the *rich and great*?—the former of the humble *rheumatism* or *porrigo*, and the latter of *dyspepsia* and *noble gout*? Which of them, think you, Sir, has generally the most scope of practice, or sees the greater number of patients and their diseases in all their various and important stages and changes?

In making these observations I am far from wishing to throw slight and contumely on the physician, or of levelling his dignity by any discourtesy; on the contrary, I would wish to attach to him that respect which his elevated title claims, and "render unto Cæsar his due." I merely contend that it is absurd, inconsistent, and derogatory for the *Senatus Academicus* to insist upon the necessity of the examination of the *senile* general practitioner, for the attainment of his degree of M.D., who has been fifteen, twenty, or even thirty years in extensive and respectable practice, and who has already undergone that ordeal, and been found fit to preserve the health of the community.

I would therefore, Mr. Editor, suggest the propriety and justice of establishing a "Senior Degree," at all the Universities, for bestowing the M.D. *without examination written or oral*, to those *only* who have been fifteen, twenty, or more years in practice, and say of the age of 45 or upwards, with the following requirements and qualifications, viz.—to be honorary surgeons to hospitals or dispensaries,—to write a thesis in Latin or English—one on surgery and the other on medicine; and to pay an *extra* fee for his degree, and attend personally to receive it. This arrangement and privilege would confer honor on the candidates and add greatly to the revenues of the Universities, without in the slightest degree detracting from their dignity or lowering their status. I know men of high standing in their profession—general practitioners of the first eminence, who might be disposed to take a Senior Degree, but who would feel humiliated by—and hesitate to submit to—an examination after having previously, as students, been tried and proved by legitimate authority, and engaged in a long career of successful and honorable practice. Although it is true that some of the Universities *profess* to "make a difference" in their examinations between the practitioner and the student, yet why insist upon it at all?

As the regulations are laid down and ostensibly read, the senior practitioner finds that to obtain this enchanting M.D., it will cost him three or four months of cudgelling of brains, to rub off the rust of technical and rudimental lore; he must return to his "*Seranonquam est*;"—recapitulate his Alpha, Beta, Gamma, Delta; he must translate Celsus, Virgil, Ovid, Horace, and Homer; he must know how to make *tartar emetic*, *prussic acid*, and *sal ammoniac*, although he never saw them made in his life, yet he knows how to *use* them, and is aware, that if he gives more than five grains of the one, and five drops of the other, he may possibly

poison his patient;—he must describe the anatomy and circulation of the brain, the heart, the lungs, the liver, the kidneys, the stomach, spleen, and pancreas, their nerves, veins, and arteries—their physiology, pathology, hygrology, and all the other ologies, without any *apology* for his deficiency in carrying all these multifarious ingredients in his *craniology*,—surely enough to embarrass even the most intelligent student fresh from the schools, and more particularly the senior practitioner, who has “learnt only to unlearn.”

I should say, let the *Senatus Academicus*, or any other court of examiners, “do as they would wish to be done by,” and observe “*fair play*.” Let them concentrate and circumscribe the subjects of examination, and make them more *sectional* and *divisible*; and give the candidate *some idea* of *what* he is to be examined upon; let him not be placed on the wide ocean of science without chart or compass, and not to know whether he is to round Cape Horn, or the Cape of *Good Hope*,—to touch at Madeira, or at St. Helena; and even though the examination be protracted to a few days, as they are in some or most of the German schools, where they are continued for a fortnight or three weeks, yet they have their landmarks and courses in *some degree* charted. All this may be efficiently done without putting question and answer into the student’s mouth.

Is it possible, Mr. Editor, for the human cranium to contain the *whole range* of Medicine, Anatomy, Surgery, Midwifery, Chemistry, Pharmacy, Botany, Materia Medica, &c.;—all the diseases which “flesh is heir to,”—their treatment, prognosis, and diagnosis?—Why, it would require a vast hydraulic press to condense mechanically such immense stores of matter into the small compass of the human *caput*! I would propose that the examinations be classified into sections—nosologically arranged; embracing one, two, or more of the sections, and these to be duly advertised: thus the student would be in *some measure* prepared for the contest. I cannot do better than quote here Professor Erichson’s admirable remarks, delivered in his introductory lecture at the University College, which are so applicable to the point in question:—

“The circle of the medical sciences has, of late years, become so widely extended, and every spot within its area has become so diligently and closely cultivated, that it has become impossible for one intellect, however capacious and grasping, to master and retain the details of every department. It has become impossible for the same man to be able to cut dexterously for the stone, to tie an artery neatly and successfully, to be thoroughly conversant with the discrimination and diagnosis of the minute shades of cardiac and pulmonary disease, and to be competent to meet all the emergencies of childbirth.”

“The necessary result of this inability, on the part of any one man, to master the details of all the departments of the healing art, has been its division into two great branches—medicine and surgery.”

I think these *sectional* and *divisible* examinations would lead to better and more satisfactory results; as it would give the student more confidence, and relieve him from vast embarrassment and previous anxiety; and I would ask your judgment, Mr. Editor, or that of any of your numerous readers, in what less estimation the student’s professional attainments would be considered by such division of intelligence? Am I supposed to know less of the lungs or heart and its functions, if I happen to be examined on the brain and its diseases?—if questioned on gout am I thereby the more ignorant of the gravel?—do I not make the *whole* the curriculum of my studies? Every thing should be done to relieve the mind from embarrassment which more or less never fails to lay hold upon every man who has not the *slightest idea* of what he is going to be questioned upon; and even highly-talented individuals must often thereby appear under very great and even humiliating disadvantages.

I have thus trespassed upon your valuable pages, which no doubt might have been better occupied, but I think the consideration of this most important subject would not be unattended with beneficial results.

I have the honour to remain, Sir,
Your very obedient servant,
A MEDICAL REFORMER.

THE PHILOSOPHICAL GAZETTE.

CASEINE DISCOVERED IN THE BLOOD OF FEMALES, DURING LACTATION.

M. DUMAS, some time ago, and the same chemist, together with M. Cahours, discovered the existence of caseine, or a substance having the same composition, and properties, in diseased blood.

Subsequently, M. Stas found that the blood of the placenta holds in solution a considerable amount of caseine.

It being a matter of great interest, to determine whether the normal blood of women, or females of animals, during lactation, contains caseine in solution, M. Dumas sought for it in the blood of sheep, but without success.

Messrs. Guillot and Leblanc have reported to the French Academy, experiments made on the blood of two nurses, during lactation.

The serum of these bloods deprived of albumen by coagulation by heat, filtered and treated with a few drops of acetic acid, furnished an abundant white precipitate, which has all the characters of caseine. The amount of caseine present seemed to be proportionate to the diminution in the normal quantity of albumen.

On treating the blood of infants and of men, or women not suckling, in the same manner, a very slight precipitate appeared, but in too minute quantities to be collected, and obviously different in its character to that obtained from the blood of nurses.—*Comptes Rendus*, 1850.

ON THE BEST MODE OF ADMINISTERING IODINE. IODIDE OF STARCH.

THE interesting memoir lately published by M. Chatin should attract the attention of medical men to the important part that iodine plays in medicine. According to M. Chatin, in fact, iodine is to be found in nearly all soft waters; it exists in plants, in terrestrial animals, in fermented liquors, wine, cider, perry, in milk and in eggs. It forms a part of arable earth, and its presence, in a word, is almost universal in all the aliments used by man.

When iodine is absent from the water of certain springs and of certain countries, it is remarked in these countries that the inhabitants are more unhealthy, and have a peculiar predisposition to scrofula, and goitre. The water from wells, always so unwholesome, does not contain nearly as much iodine as soft water, and the water proceeding from the liquefaction of snow is totally without it. These observations, supported by between five and six hundred analyses, are most important, and should be taken into serious consideration by medical practitioners.

These facts led to the consideration as to what form of iodine is best for internal administration, and the soluble iodide of starch having been given to scrofulous patients with remarkably rapid effect, I determined to try it further.

Combined with a body like starch, so easily assimilated with the other digestive principles, iodine is liberated immediately on its arrival in the stomach, and thus disengaged from its combination. It then acts as iodine would act, were it administered in the pure state, and not combined with alkalis or metals, which cause the loss of a portion of its efficacy.

M. Huette proposes the use of hydriodic æther, which he advises to be inhaled by the patients. This means is without doubt most ingenious, and may render great services in certain exceptional cases.

Whilst trying to reproduce soluble iodide of starch, we remarked that sugar heated for some time with the iodide of starch, precipitated as a paste, combined with it perfectly, and that the syrup which is obtained from it was of a very deep blue colour and perfectly transparent; this then will enable us to prepare a syrup with the iodide of starch.

Wishing to know in what proportions this syrup of iodide of starch can be prepared, we have made it ourselves, and have obtained the proportion of 12 grammes of iodide of starch to 1 kilogramme of syrup, which represents, according to the composition of iodide of starch, 5 grammes of iodine to each kilogramme, or $\frac{1}{2}$ per cent. When it is wished to give iodine in small doses, to order it for children, for example, to susceptible systems, or to stomachs already irritated, nothing can be better than the soluble iodide of starch. It thus replaces successfully the cod-liver, and skate-liver oils. In giving large doses of iodine, as the syrup, if taken in too great quantity, becomes disagreeable, it can be replaced by powder of iodide of starch, which may be given with rhubarb made into pills and simply mixed with water. The powder contains, combined with an excess of starch, 10 per cent. of iodine; perfectly washed in boiling alcohol deprives it of all excess of iodine which would be dangerous.

Iodide of starch can be taken in very strong doses without irritating the stomach or intestines; it acts much more readily than the other compounds of iodine, and should be preferred to them in most cases.—*Dr. Quesneville, Revue Scientifique.*

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, January 4,	at 8 P.M.
ZOOLOGICAL,	Tuesday, January 7,	at 9 P.M.
PATHOLOGICAL,	do., do.	at 8 P.M.
PHARMACEUTICAL,	do., do.	at 8 P.M.
MEDICAL,	do., do.	at 8 P.M.

THE INSTITUTE MEDICAL JOURNAL.

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THE INSTITUTE.

LONDON, SATURDAY, JANUARY 4, 1851.

AMONG the sciences subsidiary to Medicine, there is none to which we may so confidently look for aid in its advancement, as to organic chemistry, whether for the discovery of external causes disturbing the economy of health, for the supply of new, and energetic remedies, or for completing our theories of disease. Nevertheless, the rapid progress, and almost daily discoveries announced by chemists in this department of science, unfortunately, scarcely find a place in the medical journals. We are anxious that 'The Institute' should supply this desideratum. Under the head *Philosophical Gazette*, our readers will find a succinct, but, we hope, always intelligible account of such chemical facts as are from time to time made out, having any bearing upon Physiology or Medicine. It may not, therefore, be deemed out of place here to advert to a few facts already established, and to indicate the direction the researches of chemists are at present taking, in order to excite the interest, and to enlist the services of as many practical men amongst ourselves as possible. A notion is, we think, very generally entertained, if not acknowledged, that the application of chemistry to medicine is rather one of those specialities into which practice is injuriously divided, than a subject belonging to the consideration, and treatment of almost every disease. But this is a prejudice which will not bear examination. In every vital action, whether in health or disease, chemical transformations of the materials of organs, or their secretions, take place, and although at present these are in a great majority of instances not understood, it cannot be doubted that, were we accurately acquainted with them, we should have advanced greatly towards the attainment of the means of remedying the consequent disorders of health. Nor can it be reasonably controverted, that many of our remedies, with the *modus operandi* of which we are unacquainted, act by taking a part in those transformations, which it is the province of organic chemistry to trace.

Our readers are of course well acquainted with the fact that very many of the remedies we possess, derived from the vege-

table kingdom, owe their properties to the existence of principles designated vegetable alkaloids, the first discovery of which dates about forty years ago. One of the most remarkable achievements of modern chemistry, is the artificial production of compound bodies exactly analogous to those alkaloids which are formed by the vital processes in plants; like them, they are powerful bases forming definite crystalline salts with mineral, and organic acids, and in every respect they exhibit the characters of definite and stable compounds. The number of these artificial alkaloids has recently become very considerable, and among them are several so closely analogous to the natural ones, that the highest expectation prevails that ere long quinine, morphine, and others will be produced artificially. But interesting as this is, it is not for us the most important direction of chemical research.

Dr. STENHOUSE has recently published a paper descriptive of processes by which he has produced a great number of organic bases; the general principle of these processes being the decomposition of various forms of organic matter; and he has been led to infer the general law, that "whenever ammonia is produced from complex animal, or vegetable substances, it is always accompanied by the formation of organic bases."

The escape of the effete nitrogenous matter from the animal system under the form of urea, has been long recognised, and is as well established a fact as the elimination of the carbon, as carbonic acid.

Urea is carbonate of ammonia, plus water.

CHEVREUL, in 1836, and more recently, LIEBIG, have shown that in muscular flesh there exists a substance, *kreatine*, which consists of an organic base, or alkaloid (*kreatinine*), plus water.

Here, then, is a coincidence between the transformations effected in the laboratory of the chemist, and those taking place in the economy in health, strikingly manifesting the applicability of chemical laws to explain, at least, in part, the vital processes. In the transformations of the proximate elements of the food, many compounds are formed intermediate between the aliments, and the excreted matters, *urea* and *carbonic acid*. A few only of these intermediate forms are at present known; but there is good reason to believe that many more exist which have not yet been isolated. It is most curious to find among them, definite basic bodies, or alkaloids. Moreover, the solids, and fluids in health only have been examined; it is highly probable that when the investigation is extended to diseased tissues, and their juices another series of compounds will be found, and that we shall discover a complete solution of the present problematic nature of many diseases—scrofula, consumption, schirrus, &c.

Again, among the many artificial alkaloids already found, are some which have the property of acting with great energy on the living system, and which will certainly be found to possess highly valuable remedial powers, when experiments are instituted in this direction. Already, we hear that *furfural*, a substance, first studied by the late Dr. FOWNES, has been found to act in a remarkable manner upon the liver, and *Alloxan*, a body produced by the action of nitric acid on uric acid, as appears from a paper we shall shortly publish from a correspondent, is a valuable remedy in certain diseased states of the same organ.

Dr. STENHOUSE has succeeded in separating the purgative principle of aloes in a crystalline form; and as new processes are devised for operating upon vegetable bodies, scarcely any

of our remedies will probably fail to yield similarly concentrated principles.

What we are most anxious to see in organic chemistry, is a new nomenclature, which shall be at once intelligible and expressive of the composition of the substances designated by its terms, without the necessity for those barbarous and repulsive names at present in use. Such a nomenclature we may confidently look for as the result of the labours of the French chemists, Dumas, Gerhardt, Laurent, together with those of Frankland, Brodie, Kolbe, and others, whose recent labours appear to render the organic radical hypothesis of Liebig scarcely tenable. That this hypothesis has rendered great service to the science of organic chemistry, must be admitted, but its overthrow can hardly be regretted if it serves to banish such words from use as *Methylethylophenylamine*, *Ethylamylophenylamine*, and innumerable others equally difficult to pronounce and write, which render a treatise of an advocate of Liebig's theory, more like Choctaw or Cherokee than English, French, or German. We believe there are no difficulties in the science itself, which a thorough master of it, well acquainted with language, could not easily overcome in the formation of a new, simple, and well-arranged nomenclature.

THE CORONER'S COURT.

WE have hitherto discussed the nature of a Coroner's duties, the best mode of his appointment, his qualifications, the necessity of his judicial independence, and, as a means of independence, his payment by a stated and sufficient salary out of the consolidated fund, instead of by fees under the auditorship of County Justices. Our notice of these topics, which, we have reason to hope, is not opposed to the general opinion of the Profession, has mainly led us to a consideration of the personal character and fitness of the Coroner. The machinery of his court, neither official nor formal, has been otherwise than incidentally alluded to; and this embraces a field of comment and observation equal in interest to that over which we have already traversed.

In the official arrangements of a Coroner's Court, paramount in importance is the appointment of a Medical District Officer.

The speculations of a reformer—if he be a genuine and not a sham reformer—if he really have discovered an existent abuse, instead of creating one, and be anxious to remedy it,—are sure to be assisted by the everyday occurrences of society. We would humbly claim the merit of a genuine reformer, in reference to the medical arrangements of the Coroner's Court, and as one "modern instance" is worth a thousand "wise saws," we will introduce our readers to a scene recently enacted at Gravesend, as conclusive of the urgency of appointing a Medical Officer, on whom the public may rely to conduct *post-mortem* examinations.

A dock labourer, aged 50, is found dead at a public-house in High-street, Gravesend; he retires to rest at seven o'clock and is a corpse at nine o'clock in the evening; on a chair, near his bed, is a phial with some drops of laudanum remaining in it. We have nothing here to do with the poor fellow's dying directions, whatever be their moral, for us it suffices that he was suspected of committing suicide. A coroner's inquest is summoned, and a "surgeon's assistant" performs the medical obsequies of the dead. Unfortunately for himself, unfortunately for the tribunal before which he gives his evidence, he can detect nothing but a partial disease of

the heart. That may have caused death, but neither in the stomach nor the intestines could the "surgeon's assistant" trace the presence of any poison, mineral or vegetable. This was all he could depose. Whereupon the foreman of the jury, more intelligent than average jurymen, declared there being no evidence of the cause of death, the jury could not arrive at a satisfactory verdict, and he suggested that the contents of the stomach should be chemically analysed; the coroner assented, and ordered the "surgeon's assistant" and his principal to transmit the stomach, &c. to Dr. TAYLOR, Professor of Medical Jurisprudence, University College, London, than whom no abler analyst could have been selected in the United Kingdom, or elsewhere. Pending this investigation the inquest was adjourned.

The Coroner, being a man of business, informed Dr. TAYLOR that his fee would be paid by the Corporation of Gravesend. Dr. TAYLOR replied that his usual fee was ten guineas; but as the Corporation, and not the County, were to pay, he would reduce it to five; one of the frequent instances, where medical men relax or forego their fees to suit the pocket of their patients. Dr. TAYLOR, however, no less a man of business than the Coroner, hinted to him the propriety of avoiding personal responsibility even for this reduced fee, by procuring the guarantee of the Corporation. This was accordingly attempted by the Coroner, but the Mayor demurred, and on the next meeting of the inquest, the Jury found themselves as before, without proper medical evidence. Their indignation was aroused; they denounced the hesitating meanness of the Corporation, and offered themselves to pay Dr. TAYLOR's fee, but refused to give a verdict in their then state of imperfect information. The inquest was again adjourned, and we are unable to record the termination of this unseemly squabble. But whether the Corporation has paid, or will pay—whether the public-spirited jurymen will have to make good their indignant offer, or whether the analysis was abandoned, is comparatively indifferent to our argument. The whole affair is thoroughly disgraceful, and more pregnant with proof than a folio volume, of the want of a medical officer in connexion with the Coroner's Court.

To this point the Medical Profession must direct their attention. It is essentially their duty. None others have the knowledge and experience adequate to the exposure of this sad and fatal grievance. *Post-mortem* examinations cannot be made by "surgeons' assistants" and men unaccustomed to the operation. Now, the Coroner can only summon the neighbouring practitioner, who may be, either from insufficient practice or want of skill, perfectly incompetent to do the Coroner's bidding. Were a Medical Officer, duly responsible and duly paid, appointed in every Coroner's district, such a scene as that we have narrated could not occur; practised in the regular and constant duties of his station, his eye and hand would be alike keen in following out the most subtle causes of death; rarely if ever would the poisoner exult that the grave had closed over his victim in silence and without inquiry; violence would no longer rejoice in the inability of medical skill to connect the savage blow with the fatal result; and medical evidence, ceasing, as it too often has been, to be a reproach and an opprobrium, would become the safeguard and secure the confidence of the public.

MEDICAL INTELLIGENCE.

ETHNOLOGICAL SOCIETY.

December 11.

Vice Admiral Sir CHARLES MALCOLM, in the chair.

A PAPER "On the manners and customs of the Dahomans," by F. E. Forbes, Esq., Commander, R.N., was read. The Dahoman is one of the finest of the African races. His features differ widely from the negro, the nose is more aquiline, the lips protrude less, the chin is more fully developed, the colour of the skin is a deep rich brown, the hair, however, is woolly. They are tall, well formed, muscular men, able to bear great fatigue, and to suffer much privation. These physical qualities and capabilities make them valuable subjects to a military despotic king.

The king has a regular government, a court, and a standing army, which consists of two divisions—viz., the male division and the Amazons; and of which there are eight thousand of the former and five of the latter. The Amazonian division is officered by Amazons of corresponding rank to the several grades of the male division. The barracks of the Amazons are within the precincts of the Royal palace, and being virgins, are under the supervision of the chief eunuch. In campaign they are kept quite apart from the male division, and they form the Royal body-guard, but they take their share of the labour of the war. Besides the standing army, every man and nearly every woman is a soldier; and on the occasion of a war, the king levies by conscription an army, which with its commissariat amounts to fifty thousand, with which he takes the field. This army has no regular pay, but takes its share of the booty, of which the chief is the value of the prisoners that are sold into foreign slavery. Some of the prisoners are savagely murdered, and the finest of the females are reserved for the harems of the king and his chiefs. The king possesses several thousand concubines, the chiefs several hundreds, and the less wealthy as many as they can afford to maintain. Circumcision is practised among the males. The intermixture of more northern tribes has modified the negro type. The king keeps a state drunkard as a warning example of the ill effects of intoxication.

The language is harsh in sound. Ideas are much expressed by aphorisms and proverbs. Emphasis not only enforces a word, but can modify its signification. The numerals extend to five. Six is expressed by five plus one, and sixteen by ten plus five plus one.

An interesting discussion followed the reading of the paper, in which Sir Charles Malcolm, Dr. Hodgkin, the Author of the paper, Mr. Monro, a gentleman of colour from America, the Secretary, and other members took a part. Dr. Hodgkin put some questions to Mr. Monro as to the mental capabilities of the mixed and un-mixed blood of the African races in America, which elicited highly interesting answers.

MEDICAL SOCIETY OF LONDON.

December 21, 1850.

F. HIRD, Esq., Vice President, in the Chair.

ANENCEPHALOUS MONSTROSITY.

Mr. Borlase Childs exhibited to the Society the head of an anencephalous fetus. The mother was attended by Mr. Read, of Jewin-street. The labour was a natural one, and the trunk of the child perfect in its development. On examining the head there appeared to be an arrest of development in the frontal, the two parietal, the squamous portion of the temporal and in the occipital bones; the situation of the brain was occupied by a growth having all the physical appearances of a large vascular nevus. On a careful dissection of the parts, this vascular protuberance was found to be covered by a membrane similar in its appearance to the dura mater, and continuous with the proper coverings of the spinal cord. The cord itself appeared to terminate at the border of the foramen magnum. The child lived 24 hours. Mr. Childs said that, according to Vogel, the literature of these cases was abundant, in consequence of their frequency, they, in his opinion, forming more than one-third part of all human monstrosities; but this statement was at variance with the statistics of Mr. Wilde, in his work on Austria. At the Royal Imperial Hospital of Vienna, out of 23,400 births, 88 cases of monstrosity occurred, and only two of the anencephalous variety. Geoffroy St. Hilaire has separated this group into two families, viz., "pseudencephali," containing in the place of the brain a soft reddish vascular protuberance, and "anencephali," in which the brain is totally absent, without being replaced, as in the former instance, by a foreign

substance. Mr. Childs considered that the specimen before the Society was of the pseudencephalic family. In those cases in which no substitute for the brain is found, and where the cord terminates in a simple tubercle, he (Mr. Childs) thought that the theory which accounted for those deficiencies would hold good; viz., that at some period of fetal life the brain vesicles burst, and the progress of development, as a consequence, is arrested. But where, as in the instance before them, cysts containing brain and fatty matter, together with vascular tissue, occupy the place of the cerebral organs, he (Mr. Childs) thought it not irrational to suppose that the vesicles go on developing themselves in an irregular manner with a loss of that organic power by which cerebral matter is produced in its normal quantity and relations. A microscopical examination of the tumour in this case displayed blood corpuscles and fat globules, brain cysts with vascular and cellular tissue. With the arrest of development in the brain, a similar arrest takes place in the cranial vertebrae; but he (Mr. Childs) was informed by Mr. Holmes Coote, whose work on the "Homologies of the Skeleton" was well known and esteemed, that the bodies of the cranial vertebrae are always found, although altered in shape and coalesced, to form irregular masses. The arches of the cranial vertebrae are always imperfect, but the separate cranial pieces may readily be determined. He (Mr. Childs) had made no examination of the nerves of respiration and the special senses, as it would have interfered with the appearance of the head, which he had been desirous of exhibiting to the Society as little injured as possible; but he should feel much pleasure in doing so, and would lay the results before them at a future meeting. Mr. Childs then exhibited to the Society two very beautiful preparations of cranial vertebrae, for which he was indebted to the kindness of Mr. Holmes Coote, who had prepared them for the museum of St. Bartholomew's Hospital. One was the disarticulated skull of a full-grown fetus, and the other that of an anencephalous fetus. The preparations were much admired by the Fellows of the Society.

ERYSIPELAS IN AN INFANT.

Mr. Henry Smith read the details of a case of erysipelas, spreading over the whole body of an infant only a few weeks old, attended with inflammation of both knees, and with sloughing of the scrotum, ending in recovery.

Early in August, Mr. Lloyd, resident surgeon to the Bloomsbury Dispensary, asked him to see an infant six weeks old. The whole of the left knee was immensely swollen, and a thin, unhealthy discharge (purulent) came from an opening just over the outer condyle of the femur; through this opening a probe could be passed a long distance under the tissues of the thigh; it did not appear to communicate with the joint. About a fortnight previously, a swelling appeared in that situation, which Mr. Lloyd eventually punctured, and evacuated a quantity of matter. A poultice was ordered to the part, and the child, although suffering and weak, took the breast pretty well. Three days after, Mr. Smith again saw the child with Mr. Lloyd; erysipelas had attacked the left thigh, and extended to the buttock. Next day nearly the whole of the back was involved. Three days after this the whole limb was much swollen, the foot very oedematous, and the scrotum enormously distended. A profuse discharge at the same time continued from the knee. The infant now began to feel the effects of the disorder very much; vomited its milk constantly, lost flesh, and did not sleep; it was, therefore, ordered a mixture, containing *sp. amm. aromat. 3 ss.; tinct. opii, ℥ iij.; aqua ziss;*—a teaspoonful three times a day. Next day, 16th, erysipelas now covers the whole chest, left arm, abdomen, and shoulder, but the back is clear. 17th. Erysipelas much the same, but the scrotum greatly distended; discharge from knee still considerable and unhealthy; it appears to come from a depth, and has not free exit. Mr. Smith made the opening larger, and at the same time punctured the scrotum. The vomiting had ceased, and the breast was taken readily. 20th. Erysipelas all subsided; but the scrotum still greatly swollen, and livid at the under part; at one spot it is beginning to slough. Two or three incisions were made, therefore, through these parts, care being taken that the child should not lose much blood; discharge from knee healthier, and less in quantity. Child continues to bear up well. Continue mixture. 24th. A large slough of the skin and cellular tissue of the scrotum has taken place, and erysipelas has to-day attacked the left side of the face, and both the upper extremities. 28th. Erysipelas has subsided on the left side of the face, but has now attacked the right cheek, which is greatly swollen; slough from scrotum has separated, and discharge from knee nearly subsided; both hands very oedematous. Sept. 4. Considerable oedema of both legs, but no erysipelatous blush; the patient got well a few days afterwards. A fortnight after this, the mother again brought the child to Mr. Smith, she

being in considerable alarm in consequence of the right knee having become suddenly swollen to a great extent. It was universally swollen and very hot, and caused great pain. Lead lotion was ordered; the swelling, however, increased greatly, and in a few days great distension occurred just below the patella; it was evident that there was a large accumulation of fluid there. Tincture of iodine was applied over this; it gradually diminished in size, and left the joint as small and apparently as sound as it was before. The child is now looking strong and hearty. The points of interest in this case are—1st. The occurrence of erysipelas in so very young a child. Mr. Smith never observed it in an infant before. Mr. Lloyd, who has had very great experience for many years amongst the poor of a large district, states that he has never observed an instance of a similar nature. 2ndly. That erysipelas should attack successively almost every part of the body, although the exciting cause of its appearance, namely, the wound in the knee, was limited to one of the extremities. 3rdly. That so young an infant should be able to bear up against, not only the more extensive erysipelatous inflammation, but against the profuse purulent discharge from the knee, and the mischief in the serotum. 4thly. That the great effusion of the knee should be so readily absorbed, and not hinder the functions of the joint.

FUNCTIONAL PARALYSIS.

A paper by Mr. Edwin Lee, on functional paralysis was read. After alluding to the difficulty of diagnosis between functional and structural paralyses, and also between cases of functional paralysis arising from causes of centric and eccentric origin, the author observes, that a not unfrequent origin of hemiplegia or partial paralysis, which have been considered as depending upon congestion, effusion, or structural change in the brain or spinal cord, is a deficiency of due cerebral excitation, either from an imperfect supply of arterial blood to the brain, from causes of an exhausting or depressing nature, mental or otherwise, by which the faculty of volition is directly affected, and, in some instances, from original or long-continued inactivity of parts, in consequence of which the conducting powers of the nerves are impaired. As illustrations of these local paralyses, Mr. Lee cited dumbness in cases of congenital deafness, the slowness of speech in idiots, the destruction of life by what is termed nervous apoplexy, as an example of the highest degree of exhaustion or deficiency of nervous power, no pathological change being found at the autopsy, the utter absence of structural disease in numerous cases of paralysis, as ascertained by M. Lelert, physician to the Bicetre, and the occurrence of death, or of a privation of power, in particular parts from mental emotions, such as joy, fright, &c.—parts which, though employed in the performance of ordinary actions, or whose actions are more complicated, and require greater exertion of volition for their healthy performance, are necessarily more liable to be affected by whatever impairs the integrity of the faculty, than those which are directly controlled by the will, and have a more simple office. Thus the muscles of the larynx, pharynx, of the bladder, and the sphincter ani, are more subject to loss of power from mental emotion, as in the instance of temporary privation of speech, and inability to retain the alvine contents, &c., from fear, than are the flexors and extensors of the extremities. In states of nervous weakness, or paresis, from whatever cause, flexion and extension of the limbs are much more easily performed than rotation inwards or outwards; the inferior extremities are more frequently affected than the superior, whereas the muscles of the tongue and of the face, deriving their nerves directly, and without any long *trajet*, from the central organ, are affected only in extreme cases, as regards their more simple movements. The symptoms may, however, be determined to particular parts by injuries or other local causes; these are exceptions, however. These complaints are often intractable, and but little relieved by ordinary remedies, in consequence of their peculiar nature and causes not being in general sufficiently considered. Where the remedial means are chiefly directed against the mere symptom of loss of power they will mostly fail. The patient's attention being concentrated upon the complaint, it is very often kept up by habit alone for months or years, till some circumstance or other occurs to break the chain, by exciting the faculty of volition to action. To such a change, the author referred the supposed curative power of charlatans and miracle-mongers, and, in illustration, he cited the case of a young female, paraplegiac for years, who was cured of her disease by immersion in the Ouse, under the superintendence of a clergyman. This, like many similar cases, the author observed, had, in all probability, been treated in a mere routine manner, and may suffice to indicate that these complaints, especially when of long duration, are more likely to be remedied by circumstances which divert the patient's attention from their

consideration by mental agencies, tending to excite the torpid volition, or by any means in which the patient can be induced to have confidence; the apprehension of a painful or disagreeable application, as of the actual cautery, or of blisters, has sometimes a beneficial effect; whereas, the excessive sympathy of relatives and friends, the too minute attention on the part of the practitioner to particular symptoms, and a purely pharmaceutical mode of treatment, will invariably tend to retard recovery.

Dr. Forbes Winslow objected to the term "functional" in the signification attached to it by Mr. Lee. If the term function meant a certain action of a part, or condition of vitality consequent upon a particular arrangement or combination of organic matter, then he (Dr. W.) maintained, that disease or disorder of function must be associated with, or be the direct consequence of, some altered state or modification of the physical condition of the tissue, whose special active vital manifestation was implicated. He thought it physiologically and pathologically incorrect to assert, that an *abstract function* admitted of being diseased, apart from any physical affection. This doctrine was especially applicable to the disease under consideration. He considered that every action of the nerve fibre, tube, vesicle, or tissue, was invariably associated with, or the immediate result of, a *molecular change in the condition of the nerve*; such was the particular action of a motor nerve, when volition is transmitted from the sensorium to a distant portion of the body, and of the nerve of sensation, when impressions are conveyed from remote parts of the frame to the brain. He (Dr. W.) argued that there was a natural and healthy action of a nerve, to which physiologists applied the word "molecular," and that any deviation from this function must either be the direct effect of, or invariably associated with, an altered condition of the molecular action of the part affected. He thought that every action of the mind was the result of some molecular condition of the nerve vesicle and fibre. In paralysis, however trifling and transient in its character, he believed that there was some deviation from the healthy and natural state of the nervous tissue. This often escaped the minute examination of the most careful microscopist. Paralysis often resulted from the most insignificant alteration in the nervous matter. It might arise from some affection of the sheath of the nerve; from a slight effusion within it, from some abnormal condition or alteration of the cineritious granular texture of the brain, or of the nucleated nerve vesicles. It might also be associated with some morbid arrangement of the fibrous part of the nerve tissue, or some altered condition of the chemical constituent of the brain mass, or poisoned state of the blood circulating through the brain, or supplying the nervous expansions. In certain disorders of the brain, giving rise to paralysis, it was his opinion, that the "vis nervosa," "nervous energy," "force," or "fluid," as it had been variously designated by physiologists, might itself be the seat of the disease. The nervous fluid, he (Dr. W.) considered to be a blood product, and therefore it was not difficult to account for any alteration in the nervous energy itself, if the blood contained any poisonous matter, or was vitiated in its condition. He thought that *a priori* reasoning would lead to the opinion, that no purely functional affection could exist. Before the pathologist asserted that no morbid state of nervous tissue was present in any given case of disease, it would be necessary to scrutinise carefully the condition of the delicate nerve fibre, vesicle, and cell, to ascertain the state of the blood circulating through the brain; the condition of the nervous matter in reference to its chemical properties; the exact size and weight of the brain, and any deviations in colour or tint (often the only signs of organic mischief) discoverable in the vesicular or granular texture of the brain. Cerebral pathology was necessarily involved in great obscurity. Physiologists had endeavoured to discover the special functions of particular portions of the brain, and had, to some extent, succeeded. It was a well-established pathological fact, that no effusion, or extravasation, or injury could be inflicted on the corpora striata or the thalami, without its causing paralysis. In all cases of sudden affections of the motor power, preceded by well-marked head symptoms, we might safely predicate, that either in the corpora striata or thalami, disease would be detected. In considering the subject of paralysis practically, it was of great importance for the physician to diagnose successfully between cerebral paralysis, spinal paralysis, and that morbid condition of the sensor and motor nerves which commenced in the periphery of the nerves themselves. Dr. Marshall Hall, as the result of his laborious experiments and inquiries, had conclusively established, that in cerebral paralysis there existed augmented irritability, tonicity of muscular fibre, with emotional influence little if at all impaired; but that, in spinal paralysis, when the influence of both brain and spinal marrow was cut off, the opposite symptoms were manifested, viz., diminished irritability and muscular tone, &c. These were im-

portant physiological data to bear in mind in connexion with the history of any given case when forming an opinion in difficult and obscure cases of paralysis. He, Dr. W., thought that the condition of the brain depended upon the proportion of phosphorus it contained; that in many cases of paralysis, associated with a low condition of vitality, as well as in states of great mental depression, and in idiocy, the *minimum* quantity of this important brain element would be discovered. He referred to an affection which he termed "*mental paralysis*," unassociated with true insanity or dementia. In this disease, the patient lost suddenly all command over a train of thought or idea. It was generally connected with a depressed state of the nervous system, occurred principally among persons whose minds had been overworked, and was, he thought, the effect of a non-fibrinous condition of the blood, and of exhausted nervous energy. He then made some observations deprecatory of depletion in cases of paralysis, and observed, that in circumferential paralysis, the sensation was generally more affected than the motor power. He thought that paralysis might commence in the extremities and gradually extend to, and involve the brain itself, producing in this great nervous centre, organic mischief.

Additional remarks were offered in the course of the discussion by Dr. Murphy, Dr. Snow Beck, Messrs. Hird, Dendy, Fisher, and Chippendale, supporting the views put forwards by the essayist, as to the occurrence of functional paralysis, and cases and microscopic examinations were mentioned, by which those views were further elucidated. Dr. Winslow, in his reply, reasserted the statements he had previously made, adding that in those cases where no structural lesion had been detected after death, the organic change would probably be found in the blood or in the chemical composition or weight of the brain itself.

PUBLIC EXCITEMENT AGAINST THE MEDICAL FACULTY OF THE MEDICAL COLLEGE, BUFFALO.

SOME months since, we heard reference to the excitement which had been created among the people of Buffalo, by an attempt, on the part of the faculty of the Medical College established in that city, to introduce "*Demonstrative Midwifery*" into their course of instruction. Having ourselves enjoyed the benefit of such instruction while a pupil, knowing that it was still afforded to the students of this city, and accustomed to esteem it as highly important, we were not a little surprised to find it considered a novelty anywhere, and yet more to understand how it could be made a subject of popular odium. When, however, we came to be apprised that the *improvement* consisted in subjecting the process of parturition to *ocular inspection* in one of its stages, our surprise at the excitement yielded to astonishment, that any teacher of the obstetric art should suppose it could be made the subject of the sense of vision, and mortification that the medical profession should have been placed in a position so well calculated to array public feeling in hostility to it. We never understood the full details of the case, until we had read the report of the trial and the testimony of the witnesses. From this it appears, that the professor supposed he had discovered that it was possible, by stethoscopic exploration of the abdomen of the pregnant female, to determine beforehand the probable presentation of the child at the time of parturition. To verify this discovery, he induced Mary Watson, an *unmarried* female, pregnant the second time, to submit first to this exploration by some, if not all, of the members of the graduating class under his direction. From the position in which the pulsation of the foetal heart were heard most plainly, the professor decided, and so announced to the class, that the presentation was one described as "*occiput to the right posteriorly, face left anteriorly.*" When the time for delivery arrived, the same woman was brought into a room in the college building, where she was fixed comfortably for her confinement, under the care of the wife of the janitor, who was to act as her nurse. The gentlemen who had previously made the stethoscopic exploration were now again summoned to be present during the labour, and one by one were permitted to make the usual vaginal examination. How often during the several hours of labour this was done by each, we are not told. Certainly, unless so frequently repeated by the whole body as very materially to annoy the woman, and interrupt the regular course of labour, but little knowledge could have been derived by each. If the progress was reported by the professor or one of their number, they could derive no personal benefit from their presence in the chamber. Be this as it may, however, *one great error* appears to have been committed in this stage of

the procedure. We were taught by one esteemed throughout the civilized world as no second-rate master of his art, that such a presentation is faulty, and should be remedied in the *early* stage, by bringing the occiput into such a position as would permit it to emerge under the arch of the pubis, while the face followed the curvature of the sacrum.

In the ardour of the professor for the new mode of diagnosis, he omitted this first duty of the accoucheur, and permitted the life of both mother and child to be put in jeopardy, through the necessary tediousness of the delivery by this false position. During all this time, however, the claims of modesty were regarded, the students maintained a proper decorum, and the woman lay covered on the bed. When, however, the head was about emerging, the clothing was so far removed as to permit the exhibition of the application of support to the perineum, and the manner in which the head issued was precisely such as had been foretold. She was then again covered, the cord tied, the placenta delivered, and the class dismissed. The woman appears as a witness in the case, and testifies that she recovered well, and has no complaint to allege of indecorous exposure or improper treatment. This we believe to be a plain, honest narrative of the events as they occurred, and we protest against every stage of the proceeding, and shall presently endeavour to justify our objections.

We coincide in one thing only with the witnesses for the prosecution; and that is in the opinion that such an exhibition could have no effect in inciting "*libidinous emotions.*" We cannot conceive of the degree of degradation in which such a result would be produced by the spectacle of the hour of nature's extremity. This would, however, be but a short-sighted view of the premises. The unnecessary exposure of those parts of our frame which have derived their common appellation from the natural instinct which prompts to their concealment, shocks the moral sensibility, diminishes the moral feeling, and debases the moral man. The knowledge of this fact has given rise to those enactments of common law by which the community protects itself from outrage by any who may have lost the sense of shame through familiarity with corruption, or who have not been endowed with proper moral sense; and medical men, we apprehend, should be the last to promote any measures which would abate this high sense of delicacy. Our intention, however, was to pass wholly unnoticed this point of the subject, and to devote our remarks entirely to the consideration of what we conceive to be the error of the case as regards medical education.

Even those witnesses who most earnestly commend the course of the Buffalo professor are careful (with, we believe, only one exception, which we shall notice presently), to declare that, however advantageous to the *pupil*, *ocular assistance* is never, or at most very rarely, resorted to by the practitioner in the walks of private life. Now it is not a little surprising, that none of these gentlemen should have referred to the fact, well established and commonly known, that skill in practice is always proportionate to concentration of attention. It has been our lot, however, to have the opportunity of observing the progress of education of the blind. There experience has taught us that no pupils are so slow in acquiring facility in reading by the fingers as those who have some lingering remnant of vision; the division of the attention between the two avenues of information produces distraction of thought, and obscures the impression.

Now we apprehend the most sturdy defender of "*ocular demonstration*" will hardly venture to assert that the risk of life can be at all diminished by that mode of observation. They all admit that they have practised with success, and comfort to themselves and patients, without it. There seems, indeed, no little discrepancy between their views, when justifying the propriety of looking at the process, and when attempting to screen themselves from the charge of unnecessary exposure. In the one case, sight is represented as affording great advantage, while, in the other, they aver they saw nothing, or, what amounts to the same thing, the hand of the accoucheur holding a napkin to the perineum, and the hairy scalp of the child emerging from the pudenda. Now, if this was all that was seen, we would ask, what possible advantage could be derived from the inspection? For all purposes of interference or assistance, the labour is over, unless convulsions, or fainting, or suspension of expulsive effort should supervene, and neither sight, nor "*second sight*," nor clairvoyance, will render any aid in these circumstances. It is too late to effect any change in the position of the child's head in relation to the mother. However false those relations may be, its only course must be onward. This brings us to the consideration of some extraordinary fallacies which are repeated by several of the witnesses.

We allude to the testimony of the Professor of Obstetrics in the College of Physicians and Surgeons of the City of New York.

The institution we honour—the man we esteem; and we dwell with grateful recollection on the noble stand they have taken in support of the cause of Medical Reform. We found it almost impossible to believe that from such a quarter the assertion should proceed that he approves of the practice of “ocular demonstration” in obstetrics applied to the living female, and would be glad to see it established in his college to-morrow! “It is often,” says the professor, “necessary to turn the child in the uterus. In turning the fetus, it has been his practice to expose the woman entirely. Does not recollect of ever taking but three of his students with him on such occasions. Would have no objection to students being present—not at all. Would prefer it, if practicable. On such occasions, the woman is exposed, so far as clothes are concerned, ENTIRELY.” We will waive our objections to the tone of the greater part of the testimony of this witness, and ground our condemnation simply on the question—What possible aid can the eyes furnish? Can they detect the position of the feet of the fetus through the walls of the uterus and the parietes of the abdomen? Can they ascertain the contraction or relaxation of the womb, by the amount of which the time for action or quiescence is to be determined? Why expose the person of the woman at all? The doctor himself tells us “it would be just as improper to expose two inches below the collar-bone as two feet, if it were unnecessary.” Most gladly would we learn in what consists the necessity for the exposure of one inch of the superficies. We should consider it quite as unnecessary as another part of the professor’s proceeding, which consists, he says, in laying “the patient upon her posteriors upon a table, with the person entirely exposed.” Truly, we cannot be surprised that he has found “turning the fetus a very dangerous and difficult operation—the life of the mother is often in danger.”—*American Journal*.

HEALTH OF LONDON DURING THE WEEK.—The return for the week ending last Saturday shows that 1,196 deaths were registered in the metropolitan districts; in the first three weeks of December they were 1,004, 1,090, and 1,166. This increase is considerable, and must be attributed in part to the character of the weather, which has been unfavourable to the public health; but, as in the previous week, it is also due to some coroner’s returns, which were not completed, as regards registration, when the inquests were held, but have been accumulating till the end of the quarter. In the ten corresponding weeks of the years 1840-9, the returns varied from 910 deaths in 1845, at a period of rather higher than average temperature, to 1,403 in 1848, when scarlatina and typhus were rife, and cholera had begun, these epidemics having succeeded to the influenza of the former year. The following comparative statement of deaths at particular ages shows that, while the mortality of the young was not greater than usual in the last week, there was an excess above the average among persons of middle age:—

	Last Week.	Average of Ten Weeks. (1840-49)
From birth to 15 years...	512	514
From 15 years to 60 ...	423	378
At 60 and upwards ...	232	260

Amongst children, however, hooping-cough, diarrhoea, and small-pox appear on the increase. The deaths from the first of these complaints were 61, from diarrhoea (principally amongst infants) 31; while 25 children and five adults died of small-pox. This disease still prevails severely in Lisson-grove, where it was again fatal in seven cases between the 20th and 25th of December. Only one of the sufferers, six girls and one boy, had apparently been vaccinated. With reference to a death from small-pox, without vaccination, which occurred to a boy in High-street, Shadwell, Mr. Ross observes that “four other children are suffering from the same complaint in the family; the father refuses to give his children the protection of cow-pox, and such is the result; but the mischief does not end here, for the deadly poison is disseminated through the neighbourhood.” Another death from small-pox, without vaccination, is recorded by the same registrar in a house at Elm-row, Shadwell, and here also “four other children are suffering under small-pox, the father entertaining objections to vaccination. The registrar of Haggerstone West mentions a family at Hoxton, in which the wife, son, daughter, and servant died of scarlet fever, all within a short period. A child in Chapel-street, Woolwich, died, according to the medical certificate, of “miasmatic poisoning.”

The class of “diseases of the respiratory organs,” comprises laryngitis, bronchitis, pleurisy, pneumonia, asthma, and other diseases of the lungs, exclusive of phthisis, and numbers in this return 264 deaths, which is more than the average. From bronchitis there were 120, from pneumonia, 90; the former showing an increase on the previous week, the latter a decrease.

Three deaths are ascribed to privation of food or clothing, 11 amongst children to want of breast milk, 2 to neglect, and 2 to intemperance. The death of a girl, aged 7 years, is reported by the medical attendant as caused by “hydropericardium—fright produced by a boy wearing a mask.”

The births of 658 boys and 712 girls, in all 1,370 children, were registered in the week. The average of five corresponding weeks in 1845-9, was 1,228.

At the Royal Observatory, Greenwich, the mean daily reading of the barometer was above 30 in. on every day, except Wednesday. On Monday it rose to 30.064 in., and the mean of the week was 30.192 in. The mean temperature of the week was 38.3°, which is nearly the average of the same week in seven years. On the first three days of the week, the mean temperature was below the average; during the remainder it was above it. The wind was principally in the south-west.

NAVAL APPOINTMENTS.

Surgeon.—Samuel Donnelly (1842) to the Sampson steam frigate, at Devonport.—David Geddes, M.D. (1831), to be surgeon-superintendent of the Cornwall, convict-ship.

Assistant Surgeons.—James Campbell (A) (1845) to the Imaum, 72, receiving ship at Jamaica; Julian W. Slight (1846), formerly serving in the Teazer steam vessel, to the Amphitrite, 24, at Portsmouth; Donald G. Pendrith (1850), (acting), to the Samson; and Robert Creighton (1850), (acting), to the Victory flag ship at Portsmouth.—William Crawford (1846) and John Murphy (1848), the latter recently serving in the Fury steam-sloop on the China and East India station, to the Imaum, 72, receiving-ship at Jamaica.

It may be here mentioned, for the satisfaction of the West Indian interest and those who have friends in that quarter of the world, that the above appointments of Assistant Surgeon James Campbell to the Imaum, and several Surgeons and Assistant Surgeons we have recently announced as being appointed to be borne on the books of that vessel, have been made for the purpose of their serving at Jamaica during the prevalence of the cholera there.

NOTICES TO CORRESPONDENTS.

DR. JONES’s communication has been received, and will appear in our next number.

CORRESPONDENTS will much oblige the Editors and the Printer if they will write communications intended for insertion in this journal, on one side of the paper only.

‘Gazette Médicale de Strasbourg,’ has been received.

Our esteemed correspondent at Birmingham is altogether in error. Of the Medical Protection Office and its late Manager we know very little; but of the Society which has taken its place, and which has received the title of “The London and Provincial Medical Protection and Benevolent Society,” we can speak in the highest terms. It is under the responsible management of a president, trustees, and committee, among whom will be found the names of many of the most esteemed members of the profession. Mr. Propert, the president, cannot be sufficiently commended for the zeal and energy he has displayed throughout; and it is to us a source of unfeigned pleasure to know that his philanthropic undertaking is supported by men of a kindred spirit to his own.

The numerous highly flattering letters we have received, in commendation of our last number, are very encouraging to us.

ENQUIRER.—We quite agree with ‘ENQUIRER’ that a “mine of highly valuable statistical information exists in the case-books of the surgeons in general practice,” and that a “little method, industry, and judicious working-up,” is all that is required to give the profession the benefit of their vast and varied experience. They are at present labouring under the immense disadvantage of a false position, from which we hope very speedily to see them emancipated.

JACKSON, JOHN, Esq., of Stonefield Street, Islington, is thanked for his complimentary letter; his interesting paper shall appear in an early number.

Communications have also been received from—

JAMES TOMLINSON, Esq., of Maldon.

D. SINCLAIR, of Halstead.

DR. BUTLER LANE, of Ewell.

BENJ. BELLIS, Esq., Maidenhead.

HENRY CHARLES CURTIS, Great Marlow.

JAMES GLAISHER, Esq., Royal Observatory, Greenwich.

J. JAMES, Esq., Aberayron, Cardiganshire.

ROBT. HOPWOOD, Esq., Staley Bridge.

ROBT. FIDLER, Esq., Northumberland-street, Liverpool.

GEORGE DRUMMOND, Esq., Brighton.

DR. PATRICK BROWN’s communication was unavoidably omitted, but is inserted in the present number.

ERRATA IN LAST NUMBER.

Page 296, second column, eighth line—for “I too give,” read “Stow gives.”
Thirty-ninth line—for “Carles” read “Charles.”

ADVERTISEMENTS.

MESSRS. LANE AND LARA, MEDICAL AGENTS, 14, JOHN STREET, ADELPHI, have always for disposal Practices, Partnerships, and such Businesses as are usually carried on by Professional men of all kinds, in every locality.

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GEORGE HAWTAYNE, Secretary.

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March 1st, 1850.

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Deputy Inspector-General of Hospitals.

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JOURNAL OF PSYCHOLOGICAL MEDICINE,

Edited by FORBES WINSLOW, M.D.

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London: John Churchill, Princes-street, Soho.

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	£.	£. s. d.	£. s. d.	£. s. d.
20	1000	20 17 6	6 5 3	14 12 3
30	1000	25 13 4	7 14 0	17 9 4
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14, Waterloo-place,
10th May, 1850.

A. R. IRVINE, Managing Director.

INSTITUTE OF MEDICINE AND ARTS,

No. 2, WHITEFRIARS STREET, FLEET STREET, LONDON.

ESTABLISHED JANUARY 1, 1847.

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HUNTERIAN SCHOOL OF MEDICINE.—The

Course of Lectures on the GERMAN MINERAL WATERS will be resumed on Wednesday, the 8th of January, at a quarter past Two p.m. The remaining Spas will be considered in the following order:—Tepitz, Carlsbad, Marienbad, Franzensbad, Kissingen, Bocklet, Brückena, Naumburg, Soden, Wiesbaden, Schlangenbad, Kreuznach, Nauheim, Oeynhausen, Fymont, Driburg, Schwalbach, Neundorf, Eilsen, Aix-la-Chapelle, Weilbach, Baden, near Vienna, Ems, Baden-Baden.

PERFECTION IN FILTERS AND CISTERNS.

PURE WATER is one of the most important matters that can possibly concern the heads of families, when it is known that the health is injured and the lives of all are endangered, not only by drinking Water containing gross impurities, but also from the common practice of using Lead Cisterns, it being a fact well known to practical Chemists and scientific men,—although perhaps not so generally known by the public,—that lead is acted upon by water, and the more pure the water the more readily it is affected by it.

In consideration of this fact, the *Wenham Lake Ice Company* have, for some time, directed their attention to the manufacture of Cisterns which are free from this great objection; also to the best means of rendering water perfectly pure by Filtration. They now offer, and wish more fully to introduce to the public, a perfect means of supplying pure water, by BIRD'S SYPHON WATER PURIFIER, a Filter invented by a practical Chemist, which has received the sanction of most of the leading scientific men of the day. Also, their PATENT GLASS ENAMELLED CISTERNS, which are, without exception, the best for the purpose of containing pure water ever invented; thus supplying everything desirable in connection with that most important article of domestic use—water; first, by rendering it free from all impurities, and then by furnishing a reservoir in which it may be kept for any length of time, without in the slightest degree becoming affected by metallic properties injurious to health.

These Cisterns are made of wrought iron, which is completely cased by a glass enamel fused by great heat, which will resist the strongest blow; it never chips off, and there is no deleterious article in its composition, like the ordinary enamel, which is known to contain arsenic.

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Office of the *Wenham Lake Ice Company*, 164 A, Strand, 1851.

The following are a few of the most recent Testimonials, selected from a vast number received by Mr. BIRD, since the first introduction of his Filter:—

"THE GENERAL BOARD OF HEALTH, Gwydyt House, Whitehall, June 27, 1850.
"SIR,—I have no hesitation in saying that I consider the Hydrostatic Syphon Water Purifier the best mechanical Filter I have as yet seen, because it may be used without trouble or alteration in any existing cistern.

"To ALFRED BIRD, Esq."

"I am, Sir, yours truly,
"ROBERT RAWLINSON."

FROM THE HEAD MASTER OF THE BLUE COAT SCHOOL, BIRMINGHAM.

"Mr. Bird's Patent Hydrostatic Syphon Water Purifier has been in use in this Institution for some time, and I have much pleasure in testifying to its thoroughly cleansing the water from all impurities; thereby improving the taste, and rendering it safer to drink, especially during the Summer months, when the Water abounds in impure matter. The supply from the Syphon is sufficient for our Establishment, where the consumption is necessarily large, there being nearly two hundred persons in the house.

"Blue Coat School, Birmingham, September, 17, 1850."

"GEORGE KIRKLAND, MASTER."

FROM THE PATENT JOURNAL.

"Our attention has lately been called to an invention of Mr. ALFRED BIRD, Experimental Chemist, of Birmingham, for filtering water, and which appears to be coming into very general use and appreciation. The apparatus consists of a small cylindrical metallic vessel with a tube and stop-cock, adapted for any length; in the interior are two inverted cones, and filtering media, through which the water ascends, when by drawing the air from the end of the tube, the instrument becomes a syphon. At the moment the vacuum is made by drawing the air from the tube, the filtered water flows freely, and may be drawn off without further trouble. Nothing can be more simple in its action, based as it is on the scientific principles of the laws of fluids. The water we have seen filtered by this machine, certainly appeared to be exceedingly pellucid, and to possess that freshness of flavour generally wanting in the ordinarily filtered element. On the whole, therefore, we feel pleasure in recommending this filter to public notice, more especially as it can be applied to any cistern or reservoir, and permits of an almost unlimited supply—both of which are advantages over the old filter, of no small importance. The price (if indeed price should be allowed to enter into consideration in such a question), is so moderate as to place this instrument within the reach of all."

Dr. LINDLEY, F.R.S., &c., says in the *Gardeners' Chronicle*, of November 2, 1850, that "after having had several weeks' personal acquaintance with the action of Bird's Hydrostatic Water Purifier, it appears to him to be admirably contrived for filtering water perfectly."

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BIRD'S HYDROSTATIC SYPHON WATER PURIFIER

DELIVERS (PER DAY) AN ABUNDANT STREAM OF FROM 100 TO 200 GALLONS OF WATER, EQUAL TO THAT WHICH FLOWS FROM THE FINEST MOUNTAIN SPRINGS,

Retaining all its crystalline freshness and beauty, and as brilliant and sparkling as the Diamond.

THIS FILTER is made externally of a pure white metal, more brilliant and durable than silver, and is but four inches in diameter and seven inches high. To set it in action it only requires to be dropped into the water, and the Pipe hung down outside. It purifies rain, river, tank, pond, or pump water, however dirty, the water retaining all the atmospheric air, on which the freshness of the taste depends.

It is especially adapted for the use of Private Families, Hotels, Inns, Club Houses, Hospitals, Public Institutions, Ships on long voyages, &c., &c., and in all cases where a never-failing supply of good water is desired. On ship-board the Purifier will be exceedingly valuable. If it be put into a bucket, the bucket being kept constantly full and suspended about six feet from the deck, the pipe exhausted and hung down, it will supply water of the greatest purity for a ship's company of three hundred men.

DIRECTIONS.—Carefully uncoil the Pipe, and bend it over the edge of the cistern. If the cistern be deep, the Purifier can be suspended by the bend of the pipe over the edge of the cistern, taking care that the Filter is always under water. If the cistern be shallow, the Filter should stand on two bricks at the bottom, to keep it out of the sediment which usually collects at the bottom of water cisterns. To set it going, apply the mouth to the tap, and withdraw the air. The instant the vacuum is formed, the water will rapidly ascend through the Filter, and springing over the bend of the pipe, will run an abundant stream.

For the first day, let the Tap remain constantly open, to wash out any dust which may happen to be left in the Filter, during the process of manufacture. Afterwards the Water may be drawn off as wanted.

For purifying Well or Pump Water, put the Filter into any vessel or cistern, which should be placed on a shelf or wall, four or five feet high, and kept full of Water; withdraw the air, by applying the mouth to the tap, as before directed, and it will begin to act.

If the stream should ever become small, take the Filter out of the cistern, and blow down the Pipe till all the water and impurity are forced out at the bottom. When air only goes through, replace the Instrument as before, and the stream will be found as copious as ever.

N.B.—Pipe can be had of any length, to suit the different heights of cisterns. The higher the cistern and the longer the pipe, the more copious will be the stream.

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(Purveyors to Her Majesty, the Queen.)

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BIRD'S FILTER, wholesale, retail, and for exportation.

PRICE of the FILTER, Twenty-five shillings.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 2.

LONDON, SATURDAY, JANUARY 11, 1851.

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TO THE PHYSICIANS, SURGEONS, AND APOTHECARIES IN GENERAL PRACTICE THROUGHOUT THE UNITED KINGDOM.

GENTLEMEN,—The first volume of 'THE INSTITUTE' was concluded with the number before the last, and in the commencement of another volume we crave your attention to the following APPEAL:—

We address you as General Practitioners—Under whatever title he may practise, it is to the interests of the General Practitioner *de facto* that this Journal is devoted.

Consider your position as General Practitioners. If, in England, you are Physicians, and practise generally, on the broad basis that medicine and surgery are one science—no matter what your acquirements and talents—you are repudiated by the College of Physicians. You can hold no honourable position in that College. As a corporate body the College of Physicians will have nothing to do with you. Few in number, but of immense influence in the higher circles of society, the privileged physicians hold you at arm's length, and, as far as their influence extends, by word and deed convey the impression to the public mind, that you are an inferior order of practitioners, and less worthy than themselves of the public confidence. If you are Surgeons, and practise generally, that is to say, if you satisfy the requirements of the public under all circumstances, prescribing and dispensing medicines, performing surgical and obstetrical operations, meeting the exigencies of practice in every emergency, as the great bulk of the profession are compelled to do, not only in this country, but on land and water over the surface of the whole globe, then, you are repudiated by the College of Surgeons, you are deemed unworthy of any honourable distinction, you constitute an inferior order or *membership* of that College; or if, as an exceptional case, you find an entrance into the superior order or *Fellowship*, you are regarded as a mongrel amongst the fellows of purer blood. Lastly, if you are Apothecaries, holding the position of General Practitioners, after an adequate education and tests by examination, legally performing the duties of general practice, no

matter what your learning, how skilful and successful your practice, how great your reputation, you are treated still more contemptuously, and the public, as far as the influence of those who hold the highest nominal positions in the profession can extend, are taught to regard you as out of the pale of the legitimate profession; the public are stealthily advised that you are *Apothecaries*, which is but a designation for *tradesmen*; and homoeopaths, hydropathists, mesmerists, and charlatans, if they only practise physic "legitimately," which word is rendered by both these Colleges "purely," are deemed more worthy than yourselves. Notwithstanding this, the Physicians, Surgeons, and Apothecaries, practising generally throughout the land, constitute the profession at large.

As General Practitioners, you have no head or home except that which you have voluntarily established for yourselves. In the communications between the Government and the Profession the representatives of the College of Physicians are bound by their duty and by their oaths to regard you as aliens and strangers, and to adhere strictly to the interests of their ancient institution. The representatives of the College of Surgeons are bound by their duty and their oaths to maintain the interest of Surgeons, purely considered, which is literally the interest of the *Fellowship*: as members of the College of Surgeons you can have no weight whatever with the Government, because the College still sustains the fiction of representing the interest of its members, and no government can acknowledge two parties as representing one and the same interest. Those who represent the Society of Apothecaries are bound to limit their views to medicine, in contradistinction to surgery, and to leave untouched the whole subject of the education of its members in surgery, and their practice as surgeons. As obstetricians, none of the existing institutions recognize you or represent you in the face of the Government.

Look at the existing anomalies. Look at the difficulties and intricacies which beset the Government when it attempts to deal with these anomalies. Let the question be seriously put—What is the remedy for this state of things? Upon various occasions when the Government attempted to legislate for the Profession, it naturally inferred that the College of Physicians, the College of Surgeons, and the Apothecaries' Society, constituted the Pro-

fession; but it no sooner took a step in advance, than it found itself wofully mistaken. These institutions were seen neither singly nor collectively to represent the Profession; and this is the reason that, hitherto, no Government has been able to effect any amelioration of the laws by which we are governed.

There is but one remedy for the social evils which afflict the community, and arise out of the present anomalous state of the Profession. That remedy is the establishment of a New and Independent ROYAL INSTITUTE or COLLEGE of MEDICINE, SURGERY, AND MIDWIFERY:—an Institute or College which shall receive within its pale all the General Practitioners of the present day, and provide for the full and efficient General and Professional Education of those who seek to practise as such in future; which shall regulate the general Practice of Medicine; shall have power to prevent encroachments upon the duties of the Profession by the illiterate and unqualified, and to encourage and reward the cultivation of the Science of Medicine, and the collateral branches of knowledge by its members; shall provide a representative head and an official staff, which, as having been placed in their high and honourable position by the suffrages of the Profession at large, would truly represent to the Government the feelings and the opinions of the Profession, and on all occasions might be appealed to with confidence by the Government of the day, upon subjects which concern the General Practitioner, and his relation to the public, and to public hygiene. Any government which would grapple with this subject upon a comprehensive basis, and carry it through, would confer a more lasting benefit upon the nation, than the conqueror in a hundred battles, and would deserve the gratitude of generations yet unborn.

The General Practitioners acted with forethought, discretion, public spirit, and consummate talent in organising themselves into a voluntary association; and in the whole course of their proceedings, as a combined body of so many thousand aggrieved individuals, in the case of the National Association of General Practitioners. We have recently re-perused the whole of the documents issued by that body. For judgment, temper, a logical display of all the intricate points at issue and of the true bearings of each, and for a lucid development of so difficult and entangled a question as that of Medical Reform, they are master-pieces. The General Practitioners have reason to be proud of the proceedings of this Association, and also of those of the National Institute. The Colleges, either from a deficiency of talent or a disinclination to display the truth to the world, have proved themselves unable or unwilling to explain, either to their own alumni, or to the profession and the world at large—not only the bearings of the Medical Reform question—but even their own proceedings in relation to that question; they have never issued any documents that will bear the slightest comparison in point of enlightened views and comprehensiveness with those of the General Practitioners. We state this advisedly to the profession; and for the purpose of correcting a misapprehension which has too frequently been entertained, we also state, that the talent and exertions of the Association, and of the Institute which sprung from it, have not been futile. Although the General Practitioners have not obtained their object, they have still, by their voluntary exertions, secured some considerable advantages.

The National Association convinced the Government that it is not dealing with the Profession when it deals with the existing institutions; the National Institute induced the Government to call for representatives of the General Practitioners in the joint conferences between the different classes of the Profession, and the Profession and the Government. And the justice of the cause of the General Practitioners, as set forth by the executives of these Associations, further determined the Government not to take any step in Medical Reform, without making this class in the Profession a party to the proceedings.

It is not to be doubted that this ought to convince the General Practitioners how much more they might effect by union and cordial co-operation. It is a subject of regret, that a few members of the Association—comparatively a very few—dissented from their brethren. As in all such cases a few active individuals are enabled to cause a much

greater appearance of dissent than really exists, and when we find, by the reports of the Journals of the day, that in a meeting of a thousand medical practitioners the dissatisfied portion numbered no more than *seventeen*, we are led to the conclusion that, as a body, the General Practitioners appreciate the immense interests at stake, and are virtually unanimous; and it is consolatory that the Association still exists—intact. We trust, when the proper time arrives, that it will resume its meetings, enlarge its boundaries, complete its organization, sink its differences, reanimate its executive, and, following up the advantages it has already obtained, that it will carry to the chambers of Downing-street the convincing argument, that a unanimous feeling pervades the Profession at large, and that it is determined upon a bold, active, unwearied, endless agitation and warfare, until it has accomplished, for the benefit of the people at large, a complete and efficient measure of Medical Reform.

Remember, Gentlemen, that you are not the Profession of an aristocracy or of the court, but the Profession of the millions. It is the population at large which suffers from the existing anomalies in the Profession. We appeal to you, not only as members of a liberal profession in a false position among the institutions of the country, but as men and Christians, and we call upon you to agitate for Medical Reform as a religious, as well as a social and political duty. In your capacity as General Practitioners of Medicine, the dearest interests of husbands and wives—parents and children—of whole families—rich as well as poor—are confided to you, individually. In your collective capacity, the interests of the community at large, in connexion with health and sickness, are, or ought to be, vested in you. If you continue apathetic, you are amenable for the continuance of the inconsistencies and anomalies of the laws as they at present stand, and for the direful consequences which, under your own observation, are daily occurring. On the contrary, your union and co-operation in a combined movement, made with energy and perseverance, will, assuredly, at no distant period, secure their correction, and be rewarded with satisfaction and peace in the Profession, and innumerable advantages to the community.

The first number of the second volume of 'THE INSTITUTE' was published on Saturday last, January 4th. To the principles embodied in the advertisement issued in the title-page of the present volume, 'THE INSTITUTE' will strictly adhere. We believe they are the only sound principles of Medical Reform—that any change in the laws which regulate the Profession and the medical polity of the kingdom—to prove effective, satisfactory, and permanent—must be founded on those principles. We beg our readers to bear in mind that, as a result of the development of the human mind, and the progress of knowledge, during a period of above two thousand years, in which a succession of men of the highest genius, of the most profound learning, of the most indefatigable industry, under the various denominations of physicians, surgeons, apothecaries, naturalists, chemists, or alchemists, have devoted their lives to the cultivation of medical knowledge. Medicine now emerges from the mysticism with which it was pervaded, and the artificial divisions and distinctions which have prevailed, and takes its rank amongst the Sciences. That whatever part of medicine be practised as an art, that art is referable to one and the same code of principles, and that it is preposterous folly to make diminutive portions of the art, as practised by sections of the professors of that science, the primary basis of educational and legislative distinction. We beg the General Practitioners to bear in mind, that the Medicine and Surgery which they practise are one and the same Science; that, as General Practitioners, they are totally unknown, unrepresented, repudiated, by the existing medical institutions, and, until a very recent period, by the Government of the country; because, educated in the principles of the science, they practise the art founded upon it in its universal application to the alleviation and cure of diseases, and the amelioration of the mental and physical ills with which their fellow-creatures are afflicted. This preposterous anomaly—this enormous injustice—as respects, not alone its Professors, but the Science of Medicine itself, has called 'THE INSTITUTE' into existence; and if the feelings and opinions of the promoters of this new Journal prevail, the Profession will never rest until it is corrected.

We have the honour to be,

Gentlemen,

Your devoted Servants,

THE PROPRIETORS AND EDITORS OF
'THE INSTITUTE.'

LECTURES.

LECTURES ON THE GERMAN MINERAL WATERS,
DELIVERED AT
THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

Physician to the German Hospital.

LECTURE V.

WILDBAD.

GENTLEMEN,—To proceed to Wildbad in Würtemberg, lat. 49, long. 8, we have first to reach Frankfurt, which we can do from London in about forty-four hours; thence the railroad takes us, as you see on the map, through Darmstadt, Heidelberg, to Durlach, near Karlsruhe, in about five hours. From *here* we travel by diligence through Pforzheim, and arrive, after about seven hours more, at our place of destination. Suppose you start from London on Saturday evening, you will reach Frankfurt on Monday morning, and Durlach the same afternoon. Then you might pass the night at Karlsruhe, the capital of the Grand Duchy of Baden, and avail yourselves of the diligence from that town next morning. This route will appear rather tortuous; and you will ask, why should we not retain our railroad seats as far as Baden-Baden, which lies in a due westerly direction from the spa, and is considerably nearer than the place I recommend for changing the swiftness of the steam-power, for the well-known slowness of the so-called "Eilwagen," which means haste-carriage.

If you possess the means of having a private carriage, or the resolution to walk, you would certainly be amply rewarded for any trouble or expense by the beautiful, picturesque, and romantic varieties of scenery you will meet at every step, in wending your way from the charming and fashionable Baden-Baden, the so-called Queen of the German spas, to its unpretending mountainous neighbour, who is content with merely attracting *real* sufferers from all parts of the globe, when human knowledge has endeavoured in vain to procure relief. To Her Majesty he ungrudgingly leaves all those visitors who desire to blend enjoyment and luxury with some advantageous influences on health.

The distance from Baden-Baden is about thirty English miles. The road rises more and more, and offers a sombre appearance through the forest of pine-trees you will have to pass. After having allowed yourselves to enjoy the views and prospects of the surrounding peaks and mountains from the acclivities you have had to mount, you will descend a winding road to the town of Gernsbach, in the valley of the Murg, to the east; you then ascend to the village of Laffenau; you wind your path downwards again to Herrenalb, encircled by majestic mountains. Turning to your left, you perceive curious groups of basaltic rocks, with the appearance of a fortress. Ascending, you reach a plateau, which continues for six or seven miles, and offers extensive prospects towards the north-west. After passing a deep wood, you descend to the town of Neuenburg on the Enz, north of Wildbad, in a narrow valley. From *here* you pursue the ascending course of the river for eight miles on the right shore, and you will find yourselves in the valley of Wildbad, about 1,300 feet over the level of the sea, whilst the mountains reach on each side the height of 1,500 feet. The fall of the Enz during this short distance, is 370 feet. You see the course of the river to be from south to north, consequently the spa is exposed to these two winds, whilst it enjoys mountainous protection at the east and west.

Cold naturally prevails in its climate, snow not leaving the summits of the mountains from November till May. The heat is correspondingly great in June, July, and August. The reason of my chiefly indicating the ordinary direct route, is to put you into the same position as if you had personally inspected the several spas; so that you are enabled to point out to your patients, both the remedy and the best means of attaining it. The noble receives this latter information from his courier and numerous guides; the pedestrian from his brother foot passengers. I need not tell you as regards Wildbad, that the road is nearer still, if you wander through the fields and valleys straight from Baden-Baden to the east, as is often done by the inhabitants of the environs. The town of Wildbad lies 11 leagues* (33 miles) to the west of Stuttgart, and has about 1800 inhabitants. Karlsruhe lies at a distance of 9 leagues to the north, Calw, 4 leagues to the east, Pforzheim, about 6 leagues to the north-east. The

wild and picturesque character of the environs is well worthy of admiration by those who find charms and recreation in contemplating the beauties of nature. An early walk along the river Enz, which rushes with violence through the spa, led to the following notes in my journal, which I beg leave to quote; for they best show the momentary impression that was created at the time, though they might be criticised by persons who merely expect a drily detailed description. I wrote, "I cannot imagine anything more romantic and delightful; though shallow and narrow, the river foams and hisses, so that you might imagine yourself being near a sea-shore. On both sides rise the mountains, covered with beautiful fir and pine trees, of every variety of green. Particularly charming appear the rays of the sun, when they begin to force their way over the peaks of the eastern mountain to gild the yellow waves of the furious little river." Through the almost perpendicular acclivity of the enclosing mountains, the beneficent influence of the sun is obtained an hour later from the east, and departs an hour sooner in the west, than on the surrounding localities. The spa enjoys the reputation of great antiquity; and in the beginning of the sixteenth century its curative powers were already extolled. A remarkable charter was given to the place by Charles V.; viz., "that all criminals, with the exception of murderers and highway robbers, should enjoy here peace and liberty for a year and a day." The surrounding mountains consist of ferruginous red sandstone and granite. The springs flow out of cleft granite rocks of a gray, granular character, in four divisions from north to south, forming several separated basins. The sources vary in temperature from 25 $\frac{1}{2}$ ° to (30° Reaumur; from 88° to 99° Fahrenheit). The largest bathing space also enclosing the warmest springs is called "Herrenbad," which means gentlemen's bath. On the left is observed a niche, which reaches to a considerable distance into the wall, and is called the "Hölle," being the hottest spot, out of which the chief source originates. By boards the basin is separated from another bathing space, called "Bürgerbad," (citizens' bath). Then there is a space called "Fürstenbad," (princes' bath); and another called "Frauenbad," (ladies' bath). The bottom of the baths is covered with sand; and it excites extremely pleasurable sensations to move along on the warm sand, and dig it up with the fingers, causing bubbles of gas to rise to the surface. The temperature of the water being identical with that of blood, neither heating nor cooling is required to adapt it for use. This circumstance must be considered as highly advantageous. Another point of great importance is the constant influx and efflux of the same water, with unvaried temperature and constituents, which would be positively unobtainable by any artificial contrivance. You see the water bubbling up from several holes in the sand, which impart a greater perception of warmth to the hand you hold over them, than the more distant parts. You may thus consider that the natural stimulus of this congenial heat, instead of performing a continuous action on the organism, rather divides itself into repeated and constantly renewed stimulating forces. The extent of the basins allowing muscular movement, compensates in some measure for the disadvantages of bathing in common (with separation of sexes) which is generally practised here. The water is let off every night by turning up an urn, the sides are cleaned and the sand adjusted. Before using the baths, the visitor is enjoined to take a common warm bath, and make himself worthy of reposing on the soft bed of sand. According to the susceptibility and complaint of the patient, the warmer or cooler baths are chosen. There is no doubt, that a peculiar feeling of comfort and general ease spreads over the bather. Refreshed and invigorated you will certainly feel in leaving the bath, with increased cheerfulness and desire for exercise, and with improved appetite. During the course of the baths, however, a sort of reaction sometimes appears, ushered in by unexpected lassitude, depression, headache, general languor, loss of appetite, frequent feeling of chilliness, with subsequent heat and other signs of feverish action set up in the system. Former pains of rheumatism, gout, or of wounds, sometimes momentarily reappear, after having been dormant for a long period. These ought not to discourage the sufferers; on the contrary, they are signs of peculiar power exercised on the affected organs. The apparent systemic counteraction will only assist the efficiency of the spa in overcoming the disease for which it has been employed. With properly regulated precautions the course can be continued as soon as the signs of febrile reaction, or bath eruption, in very susceptible individuals have passed away again. On the other hand it must not be looked for as an indispensable condition of cure. Patients sometimes are gradually relieved and cured of obstinate chronic diseases without these rebellious symptoms. This chiefly depends on individual idiosyncrasy. I can conceive the baths benefiting

* League, the German "Stunde," or hour, signifies such a distance as might be walked in an hour, it corresponds to about 3 English miles; a geographical German mile is rather less than 2 leagues or "Stunden," and equal to about 5 English miles.

one individual by the titillating contact with the sentient extremities of the nerves gently stimulating the cutaneous function, and indirectly promoting the secreting power of vascular and sero-fibrous organs, by which effete and stagnant deposits may be carried off to make room for healthier products, whilst in another this end is not attained till the vascular system has been put into a more or less violent commotion, whereby a new abnormal state has been created, to serve as a desirable crisis. In case the water should be entirely inappropriate, of course, nature will give us distinct signs of her ungracious reception of the remedy, and these must not be disregarded on any account. But in this respect it shares the fate of every curative agent. I shall, therefore, allude only to such cases in which this or any other spa has been carefully selected, with a proper regard not only to the disease itself, but to all those secondary circumstances mentioned in my preliminary lectures.

The constituents of the spring are, in sixteen ounces:—

Chloride of sodium	1.82
Carbonate of soda	0.53
" lime	0.34
" magnesia	0.07
" iron	0.02
" manganese.....	0.02
Sulphate of soda	0.40
" potash	0.02
Silex	0.39

Total..... 3.61

The gas dissolved in the water contains, in 100 parts:—

12½ carbonic acid.
79½ nitrogen.
8½ oxygen.

The gas evolved out of the water, however, consists, in 100 parts, of—

2.00 carbonic acid.
91.56 nitrogen.
6.54 oxygen.

Formerly the baths only were employed; but since 1836, a drinking spring has been discovered, which is also made use of, and greatly assists the efficiency of the external treatment. Its constituents, to the amount of 4½ grains in sixteen ounces, resemble very much the former, with, however, a little more silex, carbonate of lime, and carbonate of soda. The water is perfectly clear, tasteless, and of 1.004 specific gravity. To give you some idea of its quality, I have prepared an imitation. The temperature in which you taste it now is exactly that of the spa. The external properties of the respective springs will perhaps be better impressed on your memory if you examine them individually with your senses. Let us employ the tests which I indicated in a former lecture. You see that it contains little free acid; in fact, only the fiftieth part of the gas evolved is carbonic acid. *Lime water* causes therefore a very slight turbidity. Tincture of logwood shows no reaction. *Chloride of baryum* produces some precipitate, consequently sulphuric acid is present (nearly ½ a grain of sulphate of soda). Again, you see a precipitate formed by *nitrate of silver*; this shows the presence of *chlorine* (chloride of sodium is the chief ingredient, nearly two grains being present). You see that nitric acid does not dissolve the precipitate, whilst *ammonia* renders the solution perfectly clear again. *Oxalate of ammonia* informs you of the presence of lime; by the turbidity you perceive the presence of (about one-third of a grain of) carbonate of lime. You employ *basic phosphate of ammonia*, and find no double salt of ammonia-magnesia to be precipitated (there is no perceptible quantity of magnesia.) You obtain a slight turbidity by caustic alkali (there being such a small quantity of salts of earths and metals). No precipitate follows the employment of carbonate of potash, (the salts of earths present must have no other but carbonic acid in their combination). No re-action follows the employment of ferro-cyanide of potassium, nor that of ferrid-cyanide (consequently there is no perceptible quantity of iron present). Tincture of *galls* shows merely the presence of alkalies. The absence of iron is further confirmed by *hydro-sulphate of ammonia* causing no change in the solution. You see, then, that the water is "chemically indifferent," indeed, as the springs of this class are sometimes termed, though I shall prefer adopting the term, "akratic," which at once tells us that we have not to expect medicinal power from the constituents. What does then produce these beneficial changes to which I have already alluded? Some have ascribed all efficacy to the inherent caloric, which bears greater analogy to our blood, than the same temperature artificially produced. Its vitality is no more insisted upon, as it was in former times. But it is maintained, that the chemical purity imparts to the water a more solvent power on animal exhalations. It may enter

the peripheric vessels more easily, and cause absorption and excretion of earthy deposits in the tissues, previously stagnant, from a deficient plasticity, and from diminished circulation, as so often happens in real and premature old age. To all the "akratic" spas, the common property of "Verjüngen" (youth restoring), is attributed. Some explain the restored pliancy and diminished rigidity of the limbs by the kind of soap that may be formed between the alkalies contained in the water, and the oleaginous evaporation of the epidermis. This imaginary soap thoroughly rinses the ends of the excretory dermic follicles, increasing their function, and freeing the system of effete animal matter, it communicates a stimulus to organic metamorphosis.

Admitting a more unrestrained entrance of the water into the peripheric vessels, we are perhaps justified in assuming, that the small quantity of ingredients contained in the water being constantly renewed and in motion, the power of penetrating to the assimilative organs must increase with the quantity of ingredients brought in contact with the body. Have we not a right to believe that more chloride of sodium for instance, is imbibed by a person exposed to the action of this water for a certain time (though less than two grains are contained in sixteen ounces), than by another individual who bathes for the same length of time in water with 400 grains of the same salt in sixteen ounces?

The latter liquid being considerably denser, not only charged with the great amount of the dissolved ingredients, but actually of a less volume than pure water, of course penetrates with more difficulty. In fact, the beneficial results produced by such water are more sought in the stimulus exercised by the irritating power of the particles, than by their actual combination with the organic fluids. This view will also explain the reason why those springs standing between the akratic and synkratic are the least powerful. They are not diluted enough to enter the absorbent vessels so freely, nor are the constituents sufficiently strong to produce the stimulating effect of the more highly charged waters. I have then a right to attribute part of the utility of Wildbad to the chloride of sodium it contains, whilst I need not be refuted by the minor efficacy of the neighbouring Baden-Baden, which contains a greater amount of the same ingredient.

All along, gentlemen, I have endeavoured to impress the conviction on your minds, that we must not merely look on the quantity of gaseous and solid ingredients, but on their more or less intimate combination or intrinsic adherence to the water, and particularly on the manner of their reception by our organism.

Do we not meet this difference daily in common life? We call an individual badly nourished, though the most substantial diet may regularly be brought into his stomach, while another has all the appearance of being well fed, and still you may find that he does not introduce the tenth part of nutriment into his intestines. I go farther still, and assert that in the very same individual the same food produces a different impression and different digestive results, according to the period of ingestion. And it is not a question with me what a person takes within the twenty-four hours, but at what periods.

For instance, I have frequently convinced myself, and particularly during the prevalence of cholera, that substantial food is more easily dissolved and assimilated if ingested four or five hours after a light breakfast, that is, in the middle of the day, than towards the close of the ordinary time of business. The reason is obvious: after you have quite shaken off the fettering weight of slumber, and roused fresh action by a warm stimulating drink, body and mind feel the greatest vigour, which increases towards the end of the morning. In the afternoon, retrogression of animal power takes place. Towards the evening you feel incapacitated from performing considerable mental or bodily labour, independent of the work carried on during the day. Then, I ask, is it possible that, whilst all organs open to our perception appear exhausted and debilitated, the stomach, our most hard-working servant, should contract with the same vigour and excrete gastric juice, of the same strength and solvent power, as it would have done towards the end of morning? Reason says, it is impossible, and daily facts prove the impossibility. I have frequently asked commercial gentlemen, who merely take a biscuit in the middle of the day, whether they would feel distressed by waiting for their evening dinner half an hour or an hour later, than they have usually taken it for years? The answer is invariably in the negative. The craving for the ordinary meal, felt by those who take their chief food in the middle of the day, if they have to wait a short period beyond their ordinary time, is quite unknown to the former. Is not this the best proof of the want of nature being strongest at that particular period, because she is then most able to perform this function? It is an undoubted fact, and often observed by me, that *cateris paribus*, the want of an evening meal is considerably stronger

after a substantial mid-day dinner, than after a mere appetite-deluding biscuit, because, in the latter instance, the stomach has become too much weakened for energetic action. I must also mention, that I have found malt liquor to have a much better effect on digestion with the mid-day, than with the evening meal. With dyspeptic persons the evening meal is better digested without liquid. How is this to be explained? The very same view will show, that the concentrated and stronger gastric juice of the early part of the day bears dilution; and is, perhaps, benefited by it, whilst the weaker juice, a product of exhaustive digestive organs, is impeded in its function by a greater dilution. Well, if from all the above it is perfectly clear to my mind, and I hope to yours also, that such a great assimilative difference is produced in the same individual, without reference to the similarity of ingested quantity, I have a greater right partly to explain the differing results of the various spas from their modified assimilation. Perhaps you will allow me to bring a case under your notice, which strongly bears on the above question. One Sunday evening I was summoned to the house of a foreign family, where I found the lady writhing in gastric pains, and surrounded by the most anxious-looking faces imaginable. Finding on examination that she only suffered from spasms of the stomach, I minutely inquired, whether she had taken anything indigestible, or whether she had been exposed to cold? I was informed that she had lived that day as usual, found herself perfectly well and cheerful till four o'clock, when she sat down to dinner and took a small piece of fowl. An hour afterwards she was seized with these excruciating pains. No question nor cross-examination could elicit any fault of diet to have originated the complaint. The patient was between thirty and thirty-five years of age, very robust, and an apparent picture of health. Last year she was affected with cholera, and ever since her digestion and general nervous power had become weakened. Be it remembered, that an attack like the present had recurred already five or six times before at intervals of a few weeks, and the family had begun to exhibit great anxiety, seeing these frequent returns with greater and greater violence. The attacks very easily yielded to simple treatment. Once I gave tinct. valer. ammon. with liq. op. On another occasion, pil. galban. comp. with extr. hyoseyam., on the same evening hydrarg. chlor. gr. v., with a quarter of a grain of opium, and relief invariably ensued. But the task was now to prevent these distressing fits. By renewed examination next day, I learned that the lady had taken a soft egg and some toast at eleven a.m., of which I was not informed the previous night, this being considered too innocent to have any possible connexion with the complaint.

On asking whether she could not take an earlier dinner about one, and avoid lurching? I was told that she always felt so faint and hungry between eleven and twelve o'clock, as to be obliged to take some nourishment. Be it understood, that for years she had lived in the same manner without the slightest inconvenience, but since her digestion had become impaired, I explained the constant recurrence of the above attacks from her taking a second meal before the first was properly digested. I therefore enjoined her chief meal to be taken in future at the time she was in the habit of lurching, viz., between eleven and twelve, and tea four or five hours afterwards, with some slight digestible food, if prompted by a strong appetite. I promised non-return of the fits, if she merely followed this instruction; and without medicinal assistance, my prediction has been completely verified. Her digestion and strength improve daily, and no trace of these attacks has recurred now within several months.

I hope the great and often not-understood importance of the point I have discussed, will serve as an apology for this digression from our spa, to which we will now return.

Every bathing space has a depth of water of one foot, eight inches. Smooth stones are placed in several parts, to enable the bather to sit in a greater or smaller depth of water. Narrow basins adjoin the larger spaces for a small number of persons, or for single baths. The rooms for dressing are conveniently arranged and warm. The action of the water stimulates the vascular, while it calms and strengthens the nervous system. The function of the absorbent vessels increases, secretions are promoted, and the nerves regain previously diminished activity. The uterine nervous system is very favourably influenced by the water. The chief indications are furnished by *gout, rheumatism, arthritic paralysis, and contractures from wounds*. Unfortunately, or shall I say fortunately, these very diseases are likewise cured by the other three akritic spas, viz., Pfeffers, Gastein, and Teplitz; some by the halotherma of Wiesbaden; and the difficult question is therefore as yet generally undecided, what forms of the above named diseases are especially claimed by each spa? I may as well tell you, that till now these four spas have pretty well

been used indiscriminately for the same diseases, and the choice was often more due to accident or local acquaintance, than to any difference of properties; you will find arthritic, rheumatic, paralytic, and traumatic patients in each of them; and still there are great differences in their properties and corresponding differences of effects. To arrive at a satisfactory solution of this problem, I made the chief task of my journey last year. It was painful to witness at every watering-place, individuals who were cured of their complaints by the spas, but who constantly declaimed against their medical advisers, for not having chosen this place in the first instance, instead of having previously sent them to several others, where they had found no relief. I thought what a great benefit it would confer on the suffering portion of mankind, if every physician who had the opportunity, would do his utmost to determine and fix the accurate indication of each spa, and prevent these sad exhibitions of patients wandering from place to place, whilst a careful consideration might have at first chosen the appropriate remedy. Geheimerath Dr. Fricker recommends it in rheumatism, after the acute stage has passed, in gout with concretions, in neuralgic pains, in chronic diseases of the uropoetic system, as cramps, vesical hæmorrhoids, in retained and enclosed foreign substances, in contractions and stiffness, produced by scars, in paralysis resulting from apoplexy, in hysteria and retarded menstruation. The water taken internally, is said to promote the action of the liver and kidneys, and gently to increase alvine evacuation. Dr. Schweickle found the spa particularly efficacious, besides the above, in atonic ulcers of the legs, in induration of the mammary glands, in hemiplegia after typhoid fevers, &c.

Now, Gentlemen, I do not doubt that these diseases may have been cured under the influence of Wildbad, but the question with us must be, "in what derangements does it afford us the *best chance* of a cure among all the other spas?" Dr. Fallati, whom I mention last, but certainly, not least, considers Wildbad very beneficial in such forms of *gout* and *rheumatism*, in which digestion is not impaired, (should dyspepsia be present, the disease will, according to him, get worse); also in such paralysis, gout, and contractures after wounds as are connected with considerable deposits and swelling, in fact, *whenever absorption is to be produced*. The spa is particularly useful when the disease has shown previous tendency to amelioration. In hysteria, and diseases of the bones, he also finds it beneficial. In chlorosis and ulcers he would not recommend it. There is one point almost invariably remarked by the patients, as if by mutual agreement, viz., *that their limbs become more flexible*. You should, then, choose Wildbad for such cases of *arthritic paralysis*, as are based on *articular swellings* or other material cause, when increased absorption forms the chief indication. Dr. Fallati finds the efficacy increase in a direct ratio with the length of stay in the bath; this would strengthen the view of remedial imbibition helping towards the favourable result. I must not forget to mention the beautiful contrivance at Wildbad by which the patients are let down by machinery from their rooms to the baths without requiring any stairs, (it resembles that constructed in the Colosseum). On the ground floor their chairs are rolled on a sort of wooden rail-road to the respective baths. Paralytic and otherwise disabled persons form the greatest number of invalids.

Wildbad is contra-indicated in plethora, tendency to congestion, to apoplexy, to active hæmorrhages, in inflammation, and internal ulceration, in fever, &c., in fact, whenever acute disease demands a prompter treatment.

There is an establishment of whey at the place, which is, in many instances, advantageously employed.

Allow me to draw your attention for a moment, to the gaseous contents of Wildbad. You perceive no glairine nor baregine amongst the solid constituents, but is there not a certain substitute to be sought in the great quantity of nitrogen present? No importance is generally attached to the circumstance, because, forsooth, we live in and constantly inhale azote; how, then, can we expect medicinal results from such an ordinary substance? But gentlemen, how different is the effect of the element when entering the lungs as a mere emollient and companion of oxygen, returning unchanged and unabsorbed to the external world as soon as it has safely delivered the indispensable vivifying agent, oxygen, to the circulating fluid; how different, I say, from its ingestion into the alimentary canal, where it furnishes an indispensable agent for the maintenance of life!

It is true, the gas is only known from its negative properties. But, gentlemen, ought we not to seek in it some great and powerful connexion with vitality, if we find its combination with hydrogen to be the most stimulating, reviving, and reanimating substance that can possibly be taken (viz., ammonia N.H.)? We should imagine the combination of oxygen with the same

element must be a more inciting and vitality restoring agent; but, in fact, it is the most neutral substance imaginable, viz., water.

Whilst oxygen is necessary to keep the organic machinery in motion and to circulate vital caloric through all our tissues, forming, as it were, the oil of our living flame, azote is, on the other hand, equally indispensable to restore wasted tissues and fluids. Without the former we should suffocate, without the latter starve. I should not go so far as to attribute a nourishing property to the azote introduced into the absorbent vessels with the highly-diluted water. But when it is admitted, on all hands, that our tissues constantly discharge wasted particles in proportion to the regular additions provided by the arterial supplies, and when we know a great part of this waste to issue from our cutaneous pores in a gaseous form, would it not be reasonable to attribute some restoratory function to the contact and combination of the gas with organic particles? We know that, in old age, earthy or inorganic formations prevail in the reproductive sphere. Limbs become more rigid, the joints less pliable, secretions retarded, excretions diminished, vital elasticity and resisting power impaired. Substances ordinarily carried rapidly along the vascular canals in a dissolved state, are now precipitated out of the slowly moving mass, and deposited in spaces where they further impede voluntary movement.

If we see the use of a mineral water, causing distinct retrogression of these anti-vital phenomena; if we perceive gouty concretions to proceed towards resolution; if we observe contracted limbs gradually to relax again, and to try feeble efforts of long-forgotten exercise; if we find cutaneous tensesness and rigidity to diminish and to give way to a former softness; if we behold a resuscitated desire for muscular exertion and for mental work in a prostrate individual, and we know the spa, the originator of these changes, to possess a great quantity of azote, is it not legitimate to attribute to this gas part of the efficacy?

Whilst the chloride of sodium exercises its well-known beneficial influence on organic metamorphosis, stimulating digestion by forming hydrochloric acid on the one hand, and combining with albumen as soda on the other, counteracting earthy formations, azote may powerfully assist this process, and contribute towards the curative changes.

A highly-respected and well-known physician of Munich,* who visited Wildbad this year, and who of course can have no interest in propagating its fame, expressed himself in these enthusiastic terms:

"Wildbad, July, 1850.—The first month of the season has already passed and furnished very happy results. Prince T. could only walk with difficulty on sticks, and was oppressed by physical and mental suffering; cheerful and restored, he departs with grateful recollections out of the healing valley of the Enz.

"Many other visitors exchange their crutches for sticks, and walk about without further support. Several persons, bent down by spinal suffering, are daily enabled to raise their heads more towards the sky, and to approach the erect posture. Paralytics who had been unable to leave their beds for years, descend after three or four weeks' course from their rolling chairs, and try the former habitual step with a satisfactory result. But Wildbad must not be thought as affording exclusive aid to the disabled. Deeply seated internal diseases sometimes are checked here, and become retrogressive or cured. Many a result considered incredible in the distance, must be watched by an impartial observer to be confirmed. An emaciated person with impaired digestion, through a gastric ulcer, increases in corpulence and is able to perform digestion, after a four weeks' course. Another required the daily application of a catheter for two years, in consequence of an arthritic affection of the bladder, and after the sixth bath he can already dispense with the mentioned assistance.

"We have personally witnessed these results and received confirmation out of the mouths of the respective visitors. The fair sex is very numerous represented here, seeking and finding relief from their protean nervous complaints; 1,000 guests may be accommodated at a time. The apartments are good, some very elegant, the arrangements for bathing excellent in every respect. The douche is extremely well understood, and managed with highly satisfactory results. Few thermae offer the complex advantages of a water with the most appropriate temperature analogous to that of blood, receiving the bather immediately in the bubbling sources, without conducting pipes, without the artificial aid of heat or cold, and thus without volatilisation of its gaseous constituents. Wildbad has been too little appreciated by physicians. The unfortunate term 'indifferent' therma, seems to have served as a privilege to cease exploring either its chemical ingredients or its comprehensive and energetic medicinal efficacy.

"Though no more salts are contained in this therma than in

common drinking water, this very circumstance might serve to cause a more intense penetration into the organic tissues. The fact that retrogression of disease and even cure have ensued in incipient spinal softening, in gastric ulcers, in swelling of the uterus and ovaries, in chronic catarrh of the larynx and trachea, &c., justifies the above assertion.

"When larger sums shall have been devoted to the scientific examination of its imponderable gaseous constituents, and particularly of nitrogen, the most powerful agent of this therma, the spa will be properly appreciated and more frequently recommended. This year's season will be a brilliant one; as a non-resident and unprejudiced observer, I do not think I make too bold a prediction, if I prognosticate for Wildbad, that by the aid of further progress in science and medicine the period will come when this therma will receive a more determined and well defined position among therapeutic agents. Then it will not merely be resorted to in such internal diseases as resist pharmaceutical remedies, or where clear indications are wanting. This spring bubbling up out of numerous holes will then no more be designated as 'indifferent,' but as decidedly and sovereignly efficacious."

A case of paralysis of the lower extremities, produced by a severe delivery, came under my notice, which was completely cured at Wildbad during the season. Another case was reported to me of a horse-dealer who was squeezed between two wagons, and lost "the use of his legs" in consequence. He also found a complete cure in the healing source of Wildbad. But in these instances the spa was chiefly chosen from its being the nearest akrotatherma, and if a more distant spring of the same class is resorted to, this generally takes place after a useless employment of the neighbouring water. In England, however, where these local considerations lose their importance, it behoves us to recommend to our patients in every instance the one spa which will afford them the greatest chance of relief or cure.

(To be continued.)

ORIGINAL COMMUNICATIONS.

LEAVES FROM THE DIARY OF A PARISH DOCTOR.

BY THEOPHILUS PROBE, ESQ.

NO. VII.

WHY it is we know not, but certain it is, that no class of men under the sun, have been more unkindly and more severely handled, than parish doctors. Every pauper in a parish feels him or herself at liberty to sit in judgment upon his measures and upon his conduct. He is to be harassed with impunity by every official, and taken to task by leading characters of a neighbourhood for any fancied neglect, or censured by the Ladies Bountiful, if he has not in him the faculty of ubiquity. Even writers of novels and romances, if they have occasion to drag upon the stage of their history a functionary of this kind, fail not to represent him as heartless and unfeeling. The immortal Dickens, amiable and excellent as he can draw character, touches the poor parish doctor with bitterness; he makes him leave the death-bed of *Oliver Twist's* mother, without any token of sympathy or feeling; he speaks, indeed, with "more kindness than might be expected of him;" but he walks away to his dinner as if nothing important had happened. Even the kind-hearted Crabbe describes him

"As all bustle and conceit."

But Boz gives us quite a contrast in Mr. Losberne, the good impulsive doctor of the same story; he has grown rich in his craft, drives his pair, and is, doubtless, the pet surgeon of the aristocracy in the neighbourhood. His virtues stand out in full relief; his impulsive benevolence has no bounds; his very sleepiness indicates he has, at all events, *unction*. Now we would tell Mr. Charles Dickens that, in his fondness to carry out a stale, threadbare representation, as false as it is old, he has done injustice to very valuable men—men who are entitled to his kindest feelings; and that parish doctors, as a class, have as much of the milk of human kindness about them, as his pet, Mr. Losberne; that they have as much humanity, as much real feeling, and are as ready to evince it too, whenever opportunity presents itself; and God knows their very calling forces these opportunities upon them more frequently than that facetious gentleman is aware of. That there may be examples in this wide world, very analogous to the characters portrayed by Boz and Crabbe, is more than probable; but let it not go forth as the specimen of a genus, but rather as an exception to a rule. Let it not be understood that the general character of these men is heartless and unfeeling. No, no; we deny the charge, in toto!

* Dr. Ottinger.

and can exhibit, if needful, men employed in these painful duties, who have, welling up in their hearts, as pure a spring of benevolence, as diffusive a spirit of philanthropy, as can be found in the higher walks of professional life. It comes not under the category of ordinary speculation on human labour, to think or speak of professional harass; and were it not that the statistical returns mark the medical man's life as the lowest in the scale of professionals, there would be no data whereby to judge of his wear and tear. But if men would reflect a little, they must see, how small a share of ease and comfort can fall to the lot of a medical officer, who has to dispense assistance in sickness over an extensive area of a thickly populated neighbourhood, where pauperism must prevail to a fearful extent; and then, if they will think of the fact that no season exempts him from these duties—that night and day his labours must go on—that cases of distress and misery are presenting themselves constantly—that disease itself is protean in its character—that he is the oracle of the fond father, the tender mother, the anxious husband, the affectionate wife—that upon his fiat comes happiness or misery—that human judgment is weak and may fail—that an error in either prognosis or diagnosis, might subject him to serious and even ruinous injury—and that one false step will darken for ever his prospects and his hopes, and overshadow all the brightness and glory of his previous successful progress. If they will think of these things, they will neither begrudge him a fair remuneration for his labours, nor be severe in their censures, or even witty in their satires; they will not think that he rests on a bed of roses, or that his life is one of untold misery.

On the first establishment of the New Poor Law in this locality, the appointment and salaries of the medical officers, became a subject of much discussion at the board. One of those false notions which the seeming omnipotence of a new law is apt to engender, took possession of the guardians. It was said that medical relief constituted the first step towards pauperism; and, therefore, that the first step towards remedying the evil, was to do away with medical relief. Armed with the power of the law, it was easy to say no able-bodied labourer was to receive a medical order for any of his family. While a man was in health, he must himself provide medicine and medical attendance in sickness for all his family, as he found food and other necessities. It was a magnificent effort of human intellect to arrive at such grand conclusions; it was a glorious achievement of the law to propound such a splendid maxim.

Upon the faith of the practicability of this exquisite piece of legislation, the board felt no difficulty in settling the matter of medical relief. Unlike the ordinary mode of transacting business where two parties are forming a contract, and they come *viva-voce*, the one to offer, and the other to accept, settling preliminaries, the pros and the cons, hearing and talking over both sides of the question: we say, unlike common affairs of this kind, the board felt in the majesty of its intellect, that it was fully competent to settle the question itself; and it did settle it, to the astonishment, and we may add dismay, of the contracting parties. This was its mode of calculation; half-a-crown a-head per year was to be paid for all adult paupers then on the list, and sixpence for a child! The last three months was to constitute the period for the calculation, and that happened to be a period when there was the smallest number upon it. When the amount for each parish was cast up, the salary was so small, that when it appeared in the public prints, it excited no small measure of attention. We ourselves were written to by several professional friends at a distance, to know whether such could be the fact or not—for instance:—

				£	s.	d.
Wimble	.....	Population	150	.....	0	5 0
Shuffeton	....	Ditto	800	.....	5	0 0
Nibbleborough	.....	Ditto	3,500	.....	12	0 0

&c., &c., in like proportion. When these offers were made to the different candidates for this *lucrative* engagement, the document also said, "The guardians will consider themselves at liberty to send what other paupers they please." At what?—nothing! We could not ourselves avoid expostulating with one of the guardians. He was a very sensible man, and, moreover, a gentleman of no small influence; but he, like others, had been caught in the trap.

"I assure you, Sir," said he, "we pay you now more liberally than before. Don't you see, Sir, we shall do away with medical relief altogether. In two years you will not have a single pauper to attend, except the old and infirm."

"Indeed!" we replied—"well that will be a wonderful business, —by what kind of hocus pocus shall you do it?"

"By no kind of hocus pocus at all, Sir. We shall refuse it. We shall make the poor find their own doctors."

"Alas! Sir," we replied, "we wish you knew them as well as we do—but it's an experiment—try it."

Certainly, for the first twelve months there was a great reduction in the number of paupers we were called upon to attend, but what was the result of this measure throughout the country? Why the public press from one extremity to the other, was full of the grievance. Women and children dying everywhere without medical assistance. Medical officers, appointed for the purpose, residing at such distances, that there was no getting them in time to help or save the poor patients; orders refused, until death came and settled the question. But these facts are familiar to all who have paid any attention to the subject; while the country was in such a state of excitement, that the rigid character of the law was forced by this public voice to relax its severity.

What was the result of this relaxation? An increase of pauper practice of course. Did the salaries increase in proportion? No such thing; they remained in *statu quo*. Application after application was made to the Board, in the form of remonstrance, in the form of letter, after public meeting, and at last in a body, by the medical officers. No redress; the salaries were fixed, and if the parties did not like them, they might give them up, the Board would run the risk of getting others to fill the vacancy.

Alas! for the honour of the profession! Alas! for the dignity of our high calling! The Board knew well enough there would be no difficulty in that matter; they were satisfied, however small their offers might be, there were men mean and dastard enough (to answer certain other purposes), who would jump at the appointment. Oh! ye writers on professional ethics—ye who form societies to regulate the aspirants for medical celebrity, and would fain curb the base practices so rife among ye,—why have ye not a code of laws stringent enough to bind the renegades, and make them respect the laws of fraternity? There never will, while the profession stands, be safety in medical brotherhood, while freedom is permitted to exist in base and unworthy minds, to act as they please, to answer a selfish purpose. Gross defalcations will occur in spite of all your rules.

There needs in our profession a court of equity—fixed and unalterable laws, to regulate the conduct, as well as the practice of men, and this court should exercise a power and influence which could not be gainsaid. Any failure from the fixedness of its laws should subject the delinquent to pains and penalties—to which, if he would not heed, let him be "*Anathema maranatha*."

What must be the natural consequence of men forming contracts for medical attendance on the poor at a rate which cannot be remunerative? Why, what is the consequence in ordinary transactions when men are over-reached by subtle calculators? If we arrange with an architect to build a house, and fix the sum we mean to pay below the remunerative standard, what shall we expect? Why, that the house will be slightly erected; the mortar will not be good; the bricks inferior; the timber raw, of indifferent character, and soon subject to decay. Are medical men exempt from the common infirmities which beset poor human nature? Are they so full of virtue that they will make personal sacrifices in the exercise of their duty? If they do so, we have no right to expect it of them, we have no right to presume that they are different from other men. Now, we know well enough that with us, what is prescribed for a patient, is a matter with which the public have nothing to do; indeed, they know nothing about it. Coloured water may suffice for the medicament, and nature may be permitted to do all for the patient. There is no expense in that, and the Boards pay, although the patient does not get well, for they must keep, they must support the poor sufferer, and wait patiently the "*vis medicatrix nature*." The doctor has done nothing, and why? If he gives medicine likely to benefit, he incurs expense which he cannot afford—seeing that his salary does not pay for even horse-hire and toll-gates. To administer what would be just and proper, involves an injury to his family, and he cannot do it, unless his own heart tells him he ought; but who ever expects a heart in men who would contract under such circumstances? Are the public benefited by parsimonious arrangements like these? They cannot be; the poor pauper drags a miserable life; the rate-payers are not saved; to use an homely phrase they are *worsted*. Suppose a man with ague presents himself to be cured. Quinine is the only article worth a fig to benefit such a case. Can a man who gets five shillings to attend a population of 100 souls afford a single dose of quinine to such a patient, when he pays eighteen shillings an ounce for the article? It cannot be done without a sacrifice, and what right has any body of men to ask for such a sacrifice? We had some conversation very lately with a medical friend on a case of strumous disease, in short, we had been consulted. We suggested to our medical brother under whose care the case then was, that he should give in fair doses the iodide of potassium. His reply was, "Iodide of

potassium—remember, Sir, this patient is a pauper, who is to pay me for the outlay?”

We asked, “Why did you take a parish, if you felt that the Union would not pay you for doing your duty?” The reply was natural enough, “If I had not—Mr. — would, and then he would have trenched upon my connexion.” “Well,” we answered, “you must pay the penalty; for God’s sake give the poor creature the medicine we prescribe, without it you will do no good.” The practitioner was a kind and excellent creature, and instantly said, “at all sacrifice she shall have it, although, if she takes it long, it will cost me every farthing I get from the whole parish.” The patient took it, and got well. What has the parish doctor to remunerate him? Nothing, but the consciousness of having done his duty, and saved a fellow-creature; and blest to him is that consciousness. But we ask, in sober sadness, why are men to be thus sacrificed? If the labourer be worthy of his hire, for God’s sake grant it here.

(To be continued.)

CORRESPONDENCE.

To the Editor of ‘The Institute.’

SIR,—I write to thank you for sending me a number of the new Medical Journal ‘The Institute.’ I think it quite equal to any of its older contemporaries. I intend to subscribe to it, and wish it every success. I also send a paper which perhaps you will insert.

I am, Sir, Yours respectfully,

JOHN JACKSON.

6, Stonefield-street, Islington, Dec. 31, 1850.

THE NATURAL ARRANGEMENT OF THE BLOOD-VESSELS.

THERE are in the body three systems of blood-vessels—an hepatic, a pulmonic, and a systemic; each system consisting of (1) an *afferent* or taking-to vessel; (2) *perferent* or taking-through vessels; and (3) *efferent* or taking-from vessels.

FIRST OR HEPATIC VASCULAR SYSTEM.

1. *Hepatic Afferent Vessel.* The splenic vein and its roots, and the portal vein and its branches.

2. *Hepatic Perferent Vessels.* The capillaries intermediate between the terminal branches of the hepatic afferent vessel and the primary roots of the hepatic efferent vessels.

3. *Hepatic Efferent Vessels.* The hepatic veins which terminate at the top of the inferior cava. (N.B. The so-called “portal system” is an erroneous grouping of the vessels; and claiming, as it does, the veins of the stomach and bowels, as well as the splenic and portal vein, it embraces vessels which belong to two different systems—the systemic or general, and the hepatic).

SECOND OR PULMONIC VASCULAR SYSTEM.

1. *Pulmonic Afferent Vessel.* The right half of the heart, and the pulmonary artery, and its branches.

2. *Pulmonic Perferent Vessels.* The capillaries intermediate between the terminal branches of the pulmonic afferent vessel and the primary roots of the pulmonic efferent vessels.

3. *Pulmonic Efferent Vessels.* The pulmonary veins which terminate in the left auricle.

THIRD OR SYSTEMIC VASCULAR SYSTEM.

1. *Systemic Afferent Vessel.* The left half of the heart, and the aorta, and its ramifications.

2. *Systemic Perferent Vessels.* (1) The capillaries intermediate between the terminal branches of the splenic artery, and the primary roots of the hepatic afferent vessel; (2) the capillary terminations of the hepatic artery which end in the capillary terminations of the hepatic afferent vessel; and (3) the capillaries intermediate between the terminal branches generally of the systemic afferent vessel, and the primary roots of the systemic efferent vessels.

3.—*Systemic Efferent Vessels.* (1) The gastric and intestinal veins, viz., veins corresponding to the vasa brevia arteries, the left gastro-epiploic vein, some pancreatic and duodenal veins, the inferior mesenteric vein, the superior mesenteric vein, the coronary vein, and the cystic vein—all of which terminate in the trunk of the hepatic afferent vessel, or splenic and portal vein; (2) The superior and inferior venæ cavae, which terminate in the right auricle, and their tributaries—excepting the hepatic veins; also the coronary vein of the heart.

The above arrangement of the blood-vessels reveals a fact of the utmost physiological importance, and such as we do not learn every day; viz., that the *spleen* is not a thing which is complete in itself, but a part—the commencement or root—of the first or hepatic afferent vessel. The question, therefore, What is the function of the spleen? is an imperfect question. The real question is, What is the function of the hepatic afferent vessel? and why does that vessel differ from the two other afferent vessels—the pulmonic and the systemic? That is, why does it consist of a spleen, vein, and branches; and not of a heart, artery, and branches? “*Contrarium eadem est scientia.*”

If the doctrine which has been taught for the last two centuries, and which still has its supporters, be true, viz., that the digested food, or chyle, or nutriment, passes from the intestines, which are in the abdomen, through the lacteals and thoracic duct into the left subclavian vein, which is at the top of another cavity, the thorax—how happens it that Nature did not place the heart and lungs in the former cavity, and the stomach and bowels in the latter; so that the last named viscera might be near the left subclavian vein, and the digested food therefore have no great distance to go to get into it?

It is stated by Captain Sir W. E. Parry, Sir John Ross, Captain Cochrane, and other northern travellers, that the natives of the arctic regions consume from 20 to 40 lbs. of flesh and oil daily. Now as the thoracic duct is a foot and a half long, and only of the diameter of a “crow-quill,” is it not, as it were, sending a Brobdignag cargo up a Lilliputian channel, to suppose that so enormous a quantity of food can pass through such a slender vessel?

During digestive absorption, the lacteals contain an opaque milky-looking fluid; but when that process is not going on, and has for some time ceased, they contain a clear transparent fluid, similar to that contained in the lymphatics in other parts. This clear fluid, or lymph, whether it be in the lacteals or lymphatics, can be nothing else than the *liquor sanguinis*, which has filtered through the thin coats of the veins; to take up which, and return it again into the blood, is, there need be no doubt, the humble but useful office of the whole lymphatic system. Now during prolonged abstinence, and when the veins of the intestines must contain a blood very similar in quality to that in the other systemic veins, there exudes from the former vessels, and is taken up by the lacteals, a clear fluid similar to that which exudes from the latter, and is taken up by the lymphatics. But after a meal, when digestive absorption is going on, and when therefore the veins of the stomach and bowels contain, not blood simply, but a *mixture* of blood, drink, and digested food, there then exudes from those veins and is taken up by the lacteals, a fluid, which, as we might expect, is somewhat different in its appearance and qualities from that which exudes from them when they contain blood similar to that in the systemic veins in other parts; that is, it is an opaque milky-looking fluid, and not a clear transparent fluid or lymph. But, that this opaque fluid is “chyle,” or digested food, or “the fresh nutritive materials derived from the digestive process,” or “the pabulum which replenishes the blood,” or from which it derives its solid constituents—such as albumen, fibrine, and fat, or that it is “rudimentary blood,” is a supposition or assumption with which the facts do not accord.

Dec. 31st, 1850.

J. J.

CASE OF CONGENITAL MALFORMATION.

To the Editor of ‘The Institute.’

DEAR SIR,—I beg to inclose you the particulars of a case of imperfect foetation which has lately occurred in my practice, thinking the same might be of some little interest, in connexion with the other cases of acephalous foetuses, which have been inserted in your valuable Journal. Wishing you every success,

I remain, Yours truly,

HENRY CHARLES CURTIS, Surgeon.
Fellow of the Royal Medical Chirurgical Society.

Great Marlow, January 1st, 1851.

On Sunday, December 22nd, 1850, I attended a patient in her first pregnancy, who was delivered at a quarter past eleven a.m., of a fetus at the seventh month. The child was alive, and cried without any intermission the whole of the day, but died at twelve o’clock the same night. The abdominal muscles and mesentery were entirely wanting, so that the whole of the intestines, liver, bladder, &c., were exposed to view, and protruded externally in a globular form.

This is another case of the arrest of the development of the fetus, but the cause of this freak of nature, remains as in the other cases in obscurity.

THE FREQUENCY OF HERNIA.—TO WHAT ATTRIBUTABLE.

To the Editor of 'The Institute.'

SIR,—It has many times occurred to me that a predisposition to hernia is often given to man in his early infancy, attributable in some measure to the unsuitableness of the bandage used for confining the navel string, &c., but more especially to the tightness with which it is applied, to say nothing of the predilection for a piece of singed rag with a hole in it, and the supposed necessity for turning the fragment of the funis upwards.

The only object for using a bandage at all—animals doing well without any—is, I imagine, to prevent rubbing, and but for which it might, I think, be dispensed with altogether, at any rate the simple one I shall presently describe, and which I have made use of for years, will accomplish that object much more effectually and with the least possible harm.

I do not mean that the roller is always too tight when first applied, and while the infant is on its back, its stomach empty, and bowels undistended with flatus, but it quickly becomes so (as any one may find by inserting his finger between it and the abdomen, and to an extent, too, greater than would have been imagined), when either raised up for the purpose of feeding or dispersing flatus.

In any other position, however, a tight roller is injurious, and though it may be applied with the mistaken notion of preventing umbilical hernia, it either produces or gives a predisposition to other kinds of hernia.

It is certainly more than probable that the unyielding nature of the ordinary roller, applied as it usually is, without reference to alteration of posture or accumulation of flatus, by interfering with the natural elasticity of the part confined by it, transfers the pressure from within (whether arising from flatulence, incessant crying, perhaps the result of it, or from hooping-cough), to other and more yielding parts, as the inguinal regions. These, though not ruptured at the time, may, however, have their fibres so weakened, separated, or otherwise injured, that rupture is the consequence at some future period when aided by any sudden or unusual effort.

Putting aside, however, the fear of rupture, we plainly perceive, from the pleasure the infant evinces when naked, how uncomfortable, if not painful it must be to them to be so tightly bandaged while oppressed with wind; no wonder then, that ruptures so often take place in infancy from crying, caused by such compression.

With reference to the roller itself, I will state my objections to it before describing the band I referred to. When applied, as it usually is, round and round the body, the loose end sewed or joined to the under fold, it becomes not only unyielding, but one, as it were, in its action: whatever, therefore, displaces the upper roll, disturbs the under one also, causing friction where the object is to prevent it. When become too tight, it is requisite to undress the child to loosen it, and its application requires an unnecessary degree of disturbance.

The band I have referred to consists of two strips of flannel of unequal length, but of the same width (about $3\frac{1}{2}$ inches wide), the shorter strip being so placed as to slide through a loop of tape attached across the centre of the inner or longer one, which latter should go round the body and overlap in front, while the outer one should barely meet in front, but be furnished with three strings at each extremity. The band, so constructed, is laid upon the lap, and the child, on its back, placed across it, the ends of the inner and longer strip are next brought over the umbilicus, and then the ends of the outer strip brought together and tied in front by the strings attached to each end.

The advantages of this band are its ready application, the facility of loosening it without undressing the child, but above all, its freedom from friction, the inner strip keeping its place over the umbilicus, while the outer is in motion.

I am, Sir, your obedient servant,
CHARLES JONES, M.D.

7 D, Manchester Square.

BELLADONNA IN SCARLET FEVER.

To the Editor of 'The Institute.'

SIR,—In your excellent and well-conducted periodical of the 4th of January, Dr. Gardner has drawn the attention of the profession to the successful treatment of scarlet fever by means

of belladonna; and whilst alluding to the fact of Hahnemann having first proposed its employment as a prophylactic against that disease, he endeavours to throw a doubt on its preservative property, though this has been verified by hundreds of homœopathic practitioners (who, of course, in Dr. Gardner's estimation, are not entitled to the slightest credit), and by numerous careful and trustworthy physicians of the old school, among whom is the sagacious Hufeland, who states that he never found it to fail.

It was in 1801 that Hahnemann first announced his discovery of the prophylactic virtues of this drug in scarlatina, and it is true that he proposed a mode of administering it for that end, somewhat similar to that alluded to by your correspondent, though the quantity he prescribed was much less than Dr. Gardner states; but he subsequently materially modified his mode of administering it as a prophylactic, and none of his followers now employ it in the manner originally prescribed. I may mention that the usual method of employing it consists in giving a drop or less of the third to the sixth dilution of the tincture, every day, or every second or third day, whilst the person is exposed to the infection.

That the analogies of the effects of belladonna with the fever against which it is used, are not so "loose and vague" as Dr. Gardner would have us believe, I could easily show from numerous observations of very trustworthy authorities, quoted by Hahnemann in his *Materia Medica*; but passing over these, I may merely call attention to what Dr. A. T. Thomson has stated in his *Materia Medica*. Speaking of its administration as a narcotic, he says:—"It requires to be given in minute doses at first, and to be gradually increased until symptoms of its influence on the system become apparent. These are, dryness of the throat, vertigo, an eruption closely resembling that of scarlatina." Again, when treating of its use in hooping-cough, he remarks:—"It produces a state of the skin closely resembling scarlatina, accompanied with fever, suffused eye, dimness of sight, and frequently, though not always, head-ache." Its power of causing inflammation of the throat has been very frequently noticed; but I need only refer to a case observed by Mr. Wade (*Lond. Med. and Phys. Jour.*, April, 1826), where this symptom was well marked.

The circumstance, however, that led Hahnemann to think of belladonna as a prophylactic in scarlet fever, was not exactly the analogy of its effects with that disease. He was attending a family consisting of four children, three of whom took a very severe form of scarlet fever, but the fourth, who was taking belladonna for an affection of one of her fingers, escaped. Some time after this, he was called to another family, consisting of six children, one of whom had scarlet fever. Observing the rapidity of the cure in this case by belladonna, and remembering his late experience of the immunity of the child who was using this drug, he determined to try it on the other children as a prophylactic; he accordingly gave to each a small dose every third day, and they all remained free from the disease, though constantly exposed to infection.

But though I am fully satisfied from repeated observations of the efficacy of belladonna as a prophylactic, I shall not enter on a discussion of that point, merely observing, that it was not until eleven years had elapsed after its first announcement by Hahnemann, that the subject began to be carefully investigated by other physicians, and the failure of a few of the experiments Hahnemann himself accounts for, by alleging that the disease in which it had so failed was not true scarlatina, but a kind of miliary fever (*purpura miliaris*, he terms it, the *roodoonk* of Th. à Thuessink) for which it was not suitable.

But be this as it may, what chiefly concerns me at present is, the credit Dr. Gardner takes to himself for being the first to recommend belladonna as a remedy for the disease when once established. To this credit he has not the slightest claim, for Hahnemann, in the same essay in which he announces the prophylactic powers of belladonna, (published in 1801, fifty years ago!) commends it also as a remedy for the disease, indeed, as I have shown above, he was partly led to its use as a prophylactic from his knowledge of its virtues as a remedy, and from that time to the present day, belladonna has always been considered by homœopathic practitioners as the chief remedy in almost every case of scarlet fever, and the published records of homœopathic clinical experience abound with cases cured by it alone. That there are cases in which it is of no use, and for which other remedies are required, all homœopaths know, and this Dr. Gardner will find when he comes to have a little more experience on the subject.

However, I can perfectly well believe, that Dr. Gardner has met with all the success he boasts of, and feel assured that he will confer a great boon on suffering humanity, if he succeed in persuading his colleagues to abandon the often worse than useless methods hitherto employed, and to adopt his plan of treating this

disease, which at present bears such a large proportion in the bills of mortality, with the remedy which very nearly realises our idea of a specific for scarlatina. If he succeed in this, homœopaths will not grudge him his harmless growl at Hahnemann and homœopathy.

Before concluding, I would only observe, that the tincture made from the freshly expressed juice of the whole plant, is a much more certain preparation, and much less liable to lose its properties by keeping, than the extract recommended by Dr. Gardner, and that if it be used there will be no necessity for having recourse to the doubtful and expensive alkaloid atropine. I need hardly say, that I know Dr. Gardner's doses are needlessly, and fear they are dangerously large.

I am, Sir, Your very obedient Servant,
SUUM CUIQUE.

To the Editor of 'The Institute.'

DEAR SIR,—If you think the enclosed worth a place in your Journal it is quite at your service. Perhaps its brevity may be its chief recommendation.

Yours, very faithfully,
J. H. GRAMSHAW.

Gravesend, January 4, 1851.

About a month since I was sent for by a gentleman who was assisting Mr. Armstrong of this town, in the absence of his principal, to see a boy aged ten, who had fallen from a gate on which he was swinging upon a pointed stake, which had penetrated the abdomen in the left iliac region. The accident had occurred about nine in the morning, and as the distance from our residences was upwards of four miles, and the nature of the accident was not explained to the gentleman who was first called in, he went over by himself, and then sent for aid.

On my arrival, which did not take place till after twelve at noon, I learnt that our little patient after he fell, had got up and walked into school which was close at hand, and that then acute pain had come on, and he lay down on the floor. He was carried thence to his home, some little distance, and the nature of the injury was discovered, and advice sent for.

When he was first seen there were about six or eight inches of the small intestine visible, but his screaming and vomiting soon increased the protrusion. When I saw him there was quite a foot and a-half together, with a portion of omentum projecting through an opening that would barely allow of the introduction of the tip of my little finger. There was no wound of the intestine, which had been kept covered with a napkin and blanket, and by enlarging the opening in the parietes a very little it was all by degrees returned. The wound was closed and a figure-of-eight bandage applied. One small dose of calomel and opium was administered; the wound quickly healed and he recovered without any inflammatory or otherwise untoward symptoms.

The case appears to me remarkable on account of its terminating so satisfactorily after the long exposure of so large a portion of intestine. As I did not see him till nearly three hours after the accident occurred, and the bowels had been protruding nearly the whole of that time, I suggested to his medical attendant the propriety of arming himself with leeches, &c., on his next visit, but was surprised and gratified to hear that no such assistance was needed.

THE PHILOSOPHICAL GAZETTE.

ON THE VOLATILE OIL OF NUTMEGS.

By C. G. MITSCHERLICH.

FROM a series of experiments with ol. nucistæ æthereum on rabbits Mitscherlich draws the following conclusions:—

1. The volatile oil of nutmegs is a strong poison, for six drachms of it killed a middle-sized rabbit in the space of 13½ hours; two drachms killed a strong rabbit within five days; one drachm killed a small rabbit in about thirty hours; one drachm of the oil injected into the stomach of a full-grown rabbit, made it sick and ill for several days, after which it recovered. The volatile oil of nutmegs is weaker in its action than the oils of mustard, savine, and caraway, and is stronger than the oils of fennel, lemon, turpentine, juniper, and copaiba, but is nearly equal in strength to the oil of cinnamon.

2. The oil of nutmegs is absorbed, and appears to undergo a change in the blood, and passes out in this altered condition in the urine, to which it imparts a peculiar, pleasant, aromatic

odour. Neither the natural odour nor the changed odour could precisely be discovered in the blood or in the breath.

3. The oil of nutmegs produces in the stomach and jejunum a similar alteration of structure to that of the oils of caraway, fennel, lemon, turpentine, juniper, copaiba, bitter almonds, and cinnamon. In the stomach extravasation of blood and formation of blood-vesicles on the mucous membrane, which was partially softened and devoid of blood, without being inflamed in the adjacent parts. The interior of the duodenum was much divested of epithelium and filled with mucus. In the first experiment, with the enormous dose of six drachms, the stomach and the jejunum were injected with blood.

4. The most important symptoms of poisoning were frequent and powerful pulsation of the heart; slight acceleration of breathing; at first restlessness, afterwards weakness of the muscles, but considerably less than from oil of cinnamon; little or no diminution of sensibility; evacuation of hard fæces from the colon; ejection of a peculiarly smelling sanguineous urine after smaller doses, but no increased diuresis; decrease of strength and of the pulsation of the heart; difficult breathing; diminished heat in the external parts; death without convulsions. Death was produced by the absorption of the volatile oil.

Effect of the Oil of Nutmegs upon the Skin of the Human Body.

—Part of the dorsal surface of the hand was moistened with the volatile oil of nutmegs. After four minutes a very slight burning sensation was felt, which gradually increased, so that after fifteen minutes it became very unpleasant, and on being touched the reddened spot caused much pain. After thirty minutes the moistened spot was red; it burnt as after a sinapism when the skin is moderately reddened. Upon being washed the burning sensation disappeared within an hour; the epidermis did not scale off. In a second experiment with another individual the symptoms were much slighter, the burning appeared only after ten minutes, and became rather strong after another ten minutes; the hand being then washed after thirty minutes, the burning sensation was still very intense, but the skin was not red. The burning sensation continued for about half an hour: the epidermis did not scale off.—*Buchner's Rep.*, vol. xvi.

ON GITHAGIN.

BY E. A. SCHARLING.

SCHARLING has extracted from corncockle (*Agrostemma Githago*) a peculiar poisonous principle, to which he has given the name of *Githagin*.

The seeds of corncockle contain *githagin*, fatty oil, gluten, sugar, gum, starch, vegetable albumen, and the usual salts of the vegetable kingdom.

Githagin when dry resembles starch, but has a more silky appearance, and under the microscope appears somewhat crystalline. It is odourless and almost tasteless: after a short time a burning sensation is felt on the palate. It does not act on vegetable colours. It is soluble in water and dilute spirit, but it is insoluble in absolute alcohol and in æther. It is reddened by sulphuric acid like salicine. Its aqueous solution yields a precipitate with subacetate of lead.

Githagin acts as a poison on the smaller animals. A few drops of a solution (three grains of githagin in a drachm of water) killed a canary bird in twenty-four hours. A solution of ten grains killed a rabbit. Ten grains of githagin merely caused vomiting in a dog.—*Central Blatt*, No. xli. p. 651, 1850.

ON THE AMOUNT OF POTASH EXISTING IN THE BLOOD. By C. ENDERLIN, M.D.—The investigations of M. Liebig, in which he showed that soda and chloride of sodium preponderate in the blood, whilst potash and the chloride of potassium exist in excess in the liquid of the flesh, are well known. It will also be recollected, that the same chemist found lime the predominating earth of the blood, whilst magnesia prevailed in the liquid of the flesh.

The investigations of M. Enderlin, as the following table shows, are in strict accordance with those of M. Liebig; in one case only did he find the quantity of potash so great (in the blood) as to approximate to that of the liquid of the flesh. This deviation from the rule appeared sufficiently important to induce the author to repeat his analysis, which he was enabled to do, in consequence of having preserved some of the blood of the female from whom it was taken. The result was confirmed. The woman from whom the blood had been removed, had been delivered four months previously, and had ceased to suckle for a month, on account of an affection of the breasts. It is important to mention this, because it appears, as will be shown presently, that the anomaly observed was intimately connected with this circumstance.

The following table exhibits the proportion of the amount of potash to that of soda (including the chloride of sodium) in the ash of various kinds of blood.

Assuming the soda as =100, he found in the—

	Soda	Potash
Ash of the blood of a man for 100	6.5	
... .. an ox, I. 100	13.5	} 0.736 metallic chloride yielded no platinum-chloride of potassium.
... .. an ox, II. 100	5.5	
... .. a sheep 100	0.0	
... .. a calf 100	44.3	
... .. a pigeon, I. 100	43.9	
... .. a pigeon, II. 100	46.8	
Ash of the serum of a woman in the sixth month of pregnancy 100	1.6	
Ash of the serum of the same woman, 1½ month before delivery 100	1.2	
Ash of the serum of the same woman, 4 months after delivery 100	3.8	
Ash of the crur of the same woman, 4 months after delivery 100	418.0	} Analysed in 1844.
Ash of the crur of the same woman, 4 months after delivery 100	354.0	

Some of the chloride of potassium must have been volatilized on heating the alkaline chlorides to redness; hence the difference.

Henneberg obtained in the—

	Soda	Potash
Ash of the blood of the fowl for 100	40.8	
... .. the ox 100	5.9	
... .. the horse 100	9.5	

The proportion of the lime to the magnesia in the ash of the above blood was also different, and, in fact, the quantity of magnesia was increased. I found—

	4 months after delivery.		1½ month before delivery.
	I.	II.	
Lime ...	1.62	1.63	2.44
Magnesia ...	1.62	1.57	0.70

The quantity of iron was increased, whilst that of the chloride of sodium exhibited a diminution after delivery.

In young animals the quantity of potash in the blood appears constantly greater according to my experiments.

The greater part of the alkali of the blood is combined with chlorine, and becomes transferred to the serum; so that we cannot conclude upon the composition of the ash of the whole of the blood from the analysis of the ash of the clot.

On the analysis of the ash of the whole blood, I found—

	I. In the 6th month of pregnancy.	II. 1½ month before delivery.	4 months after delivery.
Peroxide of iron ...	8.64	8.05	16.20
Chloride of sodium ...	58.43	62.96	57.12

The quantity of potash in the whole blood was not determined, and the chlorine found was calculated as chloride of sodium.

M. Liebig has shown that the food of animals is not everywhere of the same composition in regard to the quantity of potash and soda contained in it, thus *e.g.* wheat, barley, oats, edible roots and foliaceous plants in the Odenwald, Saxony and Bavaria, contain salts of potash only, none of soda. The excess of potash in the blood of this woman could not be explained from the nature of the food.

Strecker has lately published some important experiments, which may be noticed here. He found that the bile of some sea-fishes, which live in a medium so abundant in soda, contained mostly potash (chocolate of potash), whilst the bile of the ox, an animal the food of which contains mostly potash with some amount of soda, yielded mere traces of potash on incineration.

The abnormal composition of the blood of the suckling woman shown in the above table is explained by her physiological condition. Milk abounds in salts of potash, and the development of the fetus demands large quantities of the salts of potash and magnesia for the formation of its tissues, especially muscular flesh.

—*Annalen*, August, 1850.

REVIEWS.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D. Vol. iii., pp. 572. Churchill, 1850.

THE third volume of this excellent quarterly journal lies before us, it is replete with the most valuable and varied information on subjects of the greatest interest to the physiologist, the physician, the jurist, and the divine. Matters connected with the welfare of the human mind cannot fail to be of the utmost interest to all who have human welfare at heart; and how can those interests

be more advanced than by the labours of the journalist, devoted to an enlightened consideration of questions most abstruse in their nature, and demanding most extensive knowledge for their elucidation, and at the same time influencing the welfare of a large portion of mankind. The afflicted are not the only persons whose interests are at stake: their relatives and friends, indeed, all interested in psychological studies, and all who desire to assert and support the best dictates of humanity, have a large stake in the questions which form the subject of the investigations pursued in the journal before us. That these are examined in both a philosophic and a humane spirit, none who have the good fortune to enjoy the acquaintance of the editor can for a moment doubt. To the few who are not so happy, we would say purchase a single number and judge for yourselves. The volume now under our notice is replete with valuable and important essays, all having a more or less direct bearing on the great questions Dr. Winslow has undertaken to solve to the best of his ability. Where all are good it would be invidious to make a selection; we shall consequently abstain from so doing, and content ourselves with boldly asserting that every medical man, and every philosopher who desires to continue and maintain his knowledge of the progress made in the solution of psychological investigation, must not be content with the possession of the journal. He must study it most attentively. There is matter in it to seriously occupy the reflecting mind.

The Correlation of Physical Forces. By W. A. Grove, M.A., F.R.S. Second Edition. Highley, Fleet Street, 1850.

THE main features of this work having been submitted to the public in a former edition and favourably received, a lengthy review of this, the second edition, would be superfluous. We may, however, remark that the work is altogether very much improved, new matter adapted to the advanced state of science has been added, and much originality of thought is displayed throughout. We shall give a few extracts for the benefit of those who may be wholly unacquainted with the author's writings, and commend the volume to all who take sincere interest in physical science.

"The position which I seek to establish in this essay is, that the various affections of matter which constitute the main objects of experimental physics, viz., heat, light, electricity, magnetism, chemical affinity, and motion, are all correlative, or have a reciprocal dependence. That neither, taken abstractedly, can be said to be the essential or proximate cause of the others, but that either may, as a force, produce the others; thus heat may mediate or immediately produce electricity, electricity may produce heat, and so of the rest, each merging itself as the force it produces becomes developed; and that the same must hold good of other forces, it being an irresistible inference that a force cannot originate otherwise than by generation from some antecedent form of forces."

"Of absolute rest, Nature gives no evidence. All matter, as far as we can ascertain, is ever in movement, not merely in masses, as with the planetary spheres, but also molecularly, or throughout its most intimate structure. Supposing, however, that motion is not an invariable function of matter, but that matter can be at rest, matter at rest would never of itself cease to be at rest; it would not move unless impelled to such motion by some other moving body, or body which has moved. This proposition applies not merely to impulsive motion, as when a ball at rest is struck by a moving spring, or pressed by a spring which has previously been moved, but to motion caused by attractions, such as magnetism or gravitation. Suppose a piece of iron at rest in contact with a magnet at rest; if it be desired to move the iron by the attraction of the magnet, the magnet or the iron must first be moved; so, before a body falls, it must first be raised. A body at rest would therefore continue so for ever, and a body once in motion would continue so for ever, in the same direction and with the same velocity, unless impeded by some other body, or affected by some other force than that which originally impelled it; but it is very generally believed that if the visible or palpable motion be arrested by impact on another body, the motion ceases, and the force which produced it is annihilated.

"Now, the view which I venture to submit is, that force cannot be annihilated, but is merely subdivided or altered in direction or character. First, as to direction. Wave your hand; the motion which has apparently ceased is taken up by the air; from the air by the walls of the room, &c.; and so by direct and reacting waves, continually communicated but never destroyed. It is true that, at a certain point, we lose all means of detecting the motion, from its minute subdivision, which defies our most delicate means of appreciation, but we can indefinitely extend our power of detecting it, accordingly as we confine its direction or

increase the delicacy of our examination. Thus, if the hand be moved in unconfined air, the motion of the air would not be sensible to a person at a few feet distance; but if a piston of the same extent of surface as the hand be moved with the same rapidity in a tube, the blast of air may be distinctly felt at several yards' distance. There is no greater absolute amount of motion in the air in the second than in the first case, but its direction is restrained so as to make its means of detection more facile. By carrying on this restraint, as in the air-gun, we get a power of detecting the motion, and of moving other bodies at a far greater distance. The puff of air which would in the air-gun project a bullet a quarter of a mile, if allowed to escape without its direction being restrained, as by the bursting of a bladder, would not be perceptible at a yard distance, though the same absolute amount of motion be impressed on the surrounding air.

"The phenomena of what is called *latent heat* have been generally considered as strongly in favour of that view which regards heat either as actual matter, or, at all events as a substantive entity, and not a motion or affection of ordinary matter. The hypothesis of latent matter is, I venture with diffidence to think, a dangerous one. It is something like the old principle of phlogiston; it is not tangible, visible, audible; it is, in fact, a mere subtle mental conception, and ought, I submit, only to be received on the ground of absolute necessity, the more so as these subtleties are apt to be carried on to other natural phenomena, and so they add to the hypothetical scaffolding which is seldom requisite, and should be sparingly used even in the early stages of discovery. As an instance, I think a striking one, of the injurious effects of this, I will mention the analogous doctrines of 'invisible light;' and I do this, meaning no disrespect to its distinguished author, any more than in discussing the doctrines of latent heat, I can be supposed, in the slightest degree, to aim at detracting from the merits of the illustrious investigators of the facts which that doctrine seeks to explain. Is not 'invisible light,' in fact, a contradiction in terms? Has not light ever been regarded as that agent which affects our visual organs? Invisible light, then, is darkness, and if it exist, then is darkness light. I know it may be said, that one eye can detect light where another cannot; that a cat may see where a man cannot; that an insect may see where a cat cannot; but then it is not invisible light to those who see it: the light, or rather the object, seen by the cat, may be invisible to the man, but it is visible to the cat, and, therefore, cannot abstractedly be said to be invisible. If we go further, and find an agent which affects certain substances similarly to light, but does not, as far as we are aware, affect the visual organs of any animal, then is it an erroneous nomenclature which calls such an agent light—a deviation from the plain accepted meaning of words which, when it takes place, is always injurious to that precision of language which is the safest guard to knowledge, and from the absence of which physical science has materially suffered.

"The term Correlation, which I selected as the title of my Lectures in 1843, strictly interpreted, means a necessary mutual or reciprocal dependence of two ideas, inseparable even in mental conception; thus, the idea of height cannot exist without involving the idea of its correlate depth; the idea of parent cannot exist without involving the idea of offspring. It has been scarcely, if at all, used by writers on physics, but there are a vast variety of physical relations to which, if it does not in the strictest and original sense apply, cannot, certainly, be so well expressed by any other term. There are, for example, many facts, one of which cannot take place without involving the other; one arm of a lever cannot be depressed without the other being elevated—the finger cannot press the table without the table pressing the finger.

"The sense I have attached to the word correlation, in treating of physical phenomena, is that of a reciprocal production; in other words, that any force capable of producing another, may, in its turn, be produced by it—nay, more, can be itself resisted by the force it produces, in proportion to the energy of such production; as action is ever accompanied and resisted by re-action: thus, the action of an electro-magnetic machine is re-acted upon by the magneto-electricity developed by its action.

"The great problem which remains to be solved in regard to the correlation of physical forces, is the establishment of their equivalents of power, or their measurable relation to a given standard."

That part of the work which treats of *light* as bearing upon the interesting subject of photography is especially worthy of perusal, and we would gladly have given our readers a portion thereof had we not already exceeded our space.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, January 11, at 8 P.M.
MEDICAL AND CHIRURGICAL,	Tuesday, January 14, at 8½ P.M.
MICROSCOPICAL,	Wednesday, do. 15, at 8 P.M.
ETHNOLOGICAL,	do. do. at 8 P.M.
MEDICAL,	Saturday, do. 18, at 8 P.M.

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THE INSTITUTE.

LONDON, SATURDAY, JANUARY 11, 1851.

WE are rapidly approaching the commencement of another Session of Parliament. In less than three weeks our Legislators will have met, and, in all probability, some measure or measures deeply affecting the Medical Profession, for good or for evil, will be enacted during the eventful year on which we have entered.

We more especially consider ourselves, and wish to be considered, as the friends, the admirers, the counsellors, of gentlemen in general practice.

On various occasions we have seen their cause opposed or betrayed, by those who ought to have espoused it. We have seen the petty squabbles of rival journalists; the supineness, the offended vanity, or the selfishness of contending Editors of the Medical Press: to these inferior motives, we have seen the great interests of the profession sacrificed, so far as they could be set at naught.

We have felt that there was no journal that could be unflinchingly depended upon at the hour of need; that might not at any moment turn round to support the Colleges in their illiberal proceedings, or run off at a tangent, professing to accomplish some impracticable crotchet.

We have, therefore, devoted ourselves to the interests of the great mass of the profession, the Surgeons in General Practice; and 'THE INSTITUTE' is emphatically the Journal of the General Practitioners—that class in the profession, which, compared with consulting Physicians and Surgeons, forms an overwhelming majority, rendering the most important and most useful services to society at large, in all its ranks, from the prince to the pauper.

What course may be taken by other medical bodies, we, as yet, know not; but we have indicated, and in general we have heartily approved the plan of action proposed by the National Institute of Medicine, Surgery, and Midwifery.

The General Practitioners of this great Empire have been, and still are, an **UNREPRESENTED BODY**. They have been woefully neglected by all past governments, although intrusted with the care of the health and lives of our warriors and heroes—the protectors and saviours of our country. They have been worse than neglected—they have been oppressed, insulted, spurned, by their own Colleges and Corporations, whose special duty it was to watch over and protect their just interests and to redress their grievances. Up to a very recent period, they continued to bear their professional and social evils, if not always with patience, at least in general with an apathy and a stoicism surprising in professional and intellectual men.

It is unnecessary at present to trace step by step the rise and progress of the Medical Reform question. The first agitation among the General Practitioners, which began in 1812, resulted in the Act of 1815, commonly called the **Apothecaries' Act**, which, though sadly curtailed of its fair proportions by the jealous opposition of the Colleges of Physicians and Surgeons, was yet a great boon to the public and to all legally-qualified gentlemen in general practice.

The second agitation was that organized by the British Medical Association in 1836, for a Faculty of Medicine to govern the whole Medical Profession, as one body corporate, on the principle of a full and free representation of all its branches; leaving individual members to practise any department, or to join any of the Colleges which choice or circumstance might direct. Failing in this, from want of unity in the Profession, from the absence of corporate power and position among General Practitioners, it became evident that, without this, nothing would be accomplished; they, therefore, and as we think, wisely, directed their efforts to obtain for their brethren a distinct incorporation into a separate College of all those who, after repeated attempts, were denied representation in either of the existing Colleges.

The third agitation was produced by the first Bill of Sir **JAMES GRAHAM**, brought into Parliament by Sir **JAMES** himself, in 1844. This measure embraced the interests of the two Colleges only, and excluded the interests of the public at large, and of the General Practitioners. Luckily, it was of such a nature as to excite not only the indignation of existing Associations, but also to arouse from their apathy the whole body of gentlemen in general practice. Local meetings were held, and Associations were formed throughout the kingdom, which with the old Associations joined to form the great National Association, which still exists, and is represented by the National Institute of Medicine, Surgery, and Midwifery.

We have, in successive numbers of our Journal, shown that the principles of the National Association and National Institute are those of **REPRESENTATION**, to be embodied in an Incorporation or College, which shall be the “head and home” of the great body of General Practitioners.

We have said that it is the want of representative government which is the true cause of all the evils that press so heavily on this class of the profession; we, therefore, admire the honest, bold, and straight-forward manner in which the gentlemen of the National Institute (after trying every possible means to conciliate, and to obtain just concession and a redress of grievances from the Council of the College of Surgeons) have prepared the Bill of which Mr. **WYLD** has taken charge in the House of Commons.

This Bill was laid on the table of the House, without discussion, at the end of the last session, and there is no doubt that it will be brought ably and prominently forward very soon after Parliament again meets.

During the recess, the Bill has, as we have already announced, been carefully revised and improved; several important alterations have been made and suggestions adopted, so as to remove, as far as possible, every reasonable objection, consistent with the principles of the measure.

There is now no time to be lost on the part of the General Practitioners themselves: they ought without a moment's delay, either individually or by small local Committees, to wait on their respective representatives in the House of Commons, to acquaint them with the nature and importance of Mr. **WYLD**'s Bill, and to urge upon them the necessity of supporting the measure.

If the gentlemen in our profession, whose interests are so deeply involved, will not take this trouble at a crisis like the present, they will have to blame themselves only should the Bill be rejected or so mutilated as to render it useless. It should be pressed on the attention of members of Parliament, that the Government is most anxious to settle medical affairs on a basis of justice to the profession, and of the greatest amount of good to the public. Sir **GEORGE GREY** pledged himself to the Institute, and he nobly redeemed his pledge—that the General Practitioners should be a party to any measure of medical legislation brought forward or approved by the Government; and we feel fully assured, that he will not suffer the refractory College of Surgeons, nor any other College, to obstruct a Bill, which, without interfering with the just privileges of other bodies, will be so advantageous to the public, by securing an adequate supply of General Medical Practitioners, thoroughly educated and tested in all the branches of medical science and practice.

The General Practitioners have a right to a College of their own upon every principle of justice and reason: their claims—their just claims—have again and again been rejected by the Colleges, and the paltry so-called concessions of the College of Surgeons are utterly beneath notice. Indeed, were all the concession claimed by those who would force upon that College freely granted, we do not believe that anything would be gained towards the peace and good government of the profession. The Consulting and the General Practitioners' with their present feelings and distinctions, never could and never would work harmoniously and beneficially together. The idea is perfectly Utopian.

In urging their just rights on members of the legislature, our medical brethren should remember, that the principles of this Bill are:—

1. The public good, by a high standard of qualification in every department of medical science and practice.
2. The incorporation of gentlemen so educated and qualified for the service of the community, into a College of their own, on a free system of representation. And
3. Full reciprocity of privileges throughout the kingdom, with other bodies whose members have been similarly and equally educated.

We again say, lose no time, but see your representatives at once and without delay, and use every legitimate influence and argument to induce them to support Mr. **WYLD**'s Bill.

MEDICAL INTELLIGENCE.

EPIDEMIOLOGICAL SOCIETY.

SECOND Ordinary Meeting, held on Monday, 6th January, at the house of the Royal Medico-Chirurgical Society, 53, Berners-street.

Dr. Babington in the Chair.

The names of sixteen gentlemen were announced, who were desirous to become members.

The meeting was well attended.

Dr. Bryson, P.N., read a paper on the infectious nature of cholera. Col. Sykes and others, who took part in the discussion, were of opinion that cholera was infectious.

At the next meeting in February, a paper will be read from the pen of S. Elliott Hoskins, Esq., M.D., F.R.S., on "The origin and progress of cholera and small-pox in Guernsey," and we have no doubt on that occasion gentlemen of opposed opinions will join in the discussion.

The President announced that committees were formed for investigations of different epidemics—small-pox and vaccination; epidemics occurring in hospitals, &c.

As the subject is one of vital importance to the public, we hope that medical men who have given cholera, in all its phases, consideration, will avail themselves of the privileges of members, to admit visitors at the meeting; and we have no doubt that the honorary secretaries, if applied to, will promote the same.

PUBLIC HEALTH.—In the week ending last Saturday the deaths registered in the metropolitan districts amounted to 1,369. Taking ten corresponding weeks, namely, the first in each of the last ten years (1841-50), it will be seen that the present return shows a greater number than in any year, except 1845, when the deaths rose to 1,417; and 1847, when they were 1,510, during a week of low temperature (the mean reading of the thermometer having scarcely exceeded 29°). In 1848 the deaths of the week amounted to 1,364, when the mortality was aggravated by influenza, which had not disappeared, but was rapidly on the decline. The average of the ten weeks was 1,167, which, if corrected for increase of population, becomes 1,273. The zymotic or epidemic class of fatal diseases, which in the present return numbers 239 cases, exhibits little difference when compared with the previous week; but the class comprising affections of the respiratory organs shows a considerable advance, the deaths therein enumerated having risen from 264 to 321—a result probably due to unseasonable warmth and moisture of the weather. It will be observed with a mean daily temperature which has been throughout the week much higher than is usual at this season, having ranged from 5 to 14 degrees above the average, that whereas bronchitis, pneumonia, and phthisis (or consumption) were fatal in 120, 90, and 124 cases respectively in the previous week, they have now risen to 152, 101, and 147. Diseases of the organs of respiration, exclusive of hooping cough and phthisis, were fatal in the aggregate last week to 321 persons, whilst the corrected average is only 257.

Amongst epidemics, small-pox carried off 24 children, and 4 men who had turned 20 years of age; measles 29 children, scarlatina 14, hooping-cough 58, and croup 9. Typhus destroyed 48 persons of various ages (rather more than the average), influenza 5, erysipelas 14, diarrhoea 19. A case of cholera, described as Asiatic, is recorded, of which the particulars are given as follow:—On the 30th of December, at the Mile-End Workhouse, a chemist, aged 66 years, "cholera Asiatic (24 hours)." He came from Shadwell to the workhouse, of which he had been an inmate three years. He was a paralytic, and was suddenly seized with cholera on Sunday.

But the sum of mortality entered in the register-books last week is, as before, considerably swelled by more than the fair contingent of cases on which inquests have been held, many at earlier dates, and a great majority of which fall under the several descriptions of poison, improper medicine, burns and scalds, hanging and suffocation, drowning, fractures, contusions, and other injury. Six persons died from poison, among whom was an infant, on the 26th ult., to which the nurse had given Dover's powder (containing opium) by mistake, the medicine having been intended for the mother. Of 27 persons who met death from burns or scalds, 21 were children, and in 16 cases the accident occurred from the clothes taking fire. Sixteen deaths occurred from drowning, and 48 from fractures, wounds, &c., of which 16 were by falls on the streets or from windows, stairs, and scaffolds, 3 by falls on board ship, 10 by horses and carriages, 4

by machinery. A man was suffocated on a lime-kiln, and 3 children in the bed-clothes. Nine children died from want of breast-milk; a man from privation, besides a child of seven months "from disease of the head and scanty supply of food." Two men were the victims of intemperance, besides two who received fatal injury when in a state of intoxication.

The births of 829 boys and 763 girls, in all 1,592 children, were registered in the week. The average number in corresponding weeks of six years (1845-50) was 1,469.

At the Royal Observatory, Greenwich, the mean reading of the barometer was above 30 in. on Sunday; the mean of the week was 29.751 in. The mean daily temperature fluctuated between 44° and 52°; and on each day of the week it was considerably higher than the average of the same day in ten years, on Sunday the excess being 5°.6. on Monday 8°.9, on Tuesday 11°.6, on Wednesday 13°.9, on Thursday 12°.1, on Friday 7°.1, and on Saturday 5°.1. The mean of the week was 47°.1. The wind was generally in the south-west.

APOTHECARIES'-HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday the 2nd of January:—Oliver Cooper Pollard, Chorley, Lancashire; John Daxon Ward, Manchester; Charles Robert Thompson, Westerham, Kent; Henry Parker, Sheffield, Yorkshire.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admittad members of the College, at a special meeting of the Court of Examiners, on January 1st:—Mr. John Maule Sutton, Greenwich, a volunteer to proceed to Jamaica, to afford relief to the cholera patients; and Mr. Henry Forester, Camden-villas, Camden-town.

ARMY MEDICAL OFFICERS.—A Parliamentary return, just issued, contains lists of the staff and regimental medical officers of the army killed during the late wars, for which honorary rewards have been granted. The following is the list as respects her Majesty's service:—

Date of Death.	Name.	Rank.	Where Killed.
12 January, 1842	J. Harcourt	Surgeon 44th Regiment	Afghanistan
13 "	W. Balfour	Assistant-Surgeon do.	Do
13 "	Dr. W. Primrose	Do	Do
18 Dec., 1845 ..	Alexander Graydon	Do 50th Regiment	Moodkee
22 "	R. B. Gahan	Do 9th Regiment	Ferozesah
11 January, 1847	F. D. Howell	Do Rifles	Kafirland
13 November ...	Dr. R. J. Loch	Do. 7th Drag. Guards...	Do
13 "	N. S. Campbell	Surgeon 73rd Regiment	Do

It is added, in a note, that "Staff Assistant-Surgeon Hume was killed in Canada, on the 5th December, 1838, during the rebellion." The following is the corresponding return for the East India Company's service:—

Date of Death.	Name.	Rank.
2 Novemb., 1840	Percival Lord	Assistant-Surgeon, Bombay Establish.
23 " 1841	G. Morison Grant	Surgeon ditto
10 January, 1842	William Duff	Superintending-Surg., Bengal Estab.
10 "	E. Roth Cardew	Assistant-Surgeon, ditto
10 "	Alexander Bryce	Do ditto
12 "	F. R. Metcalfe	Do ditto
14 "	E. T. Harpur	Surgeon ditto
10 October, "	Thos. Brickwell	Assistant-Surgeon, Bombay Estab.

All these gentlemen perished in Afghanistan. The return was procured by Sir De Lacy Evans.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CV.—CASE OF SOFTENING OF CEREBRUM AND CEREBELLUM. FATTY DEGENERATION OF HEART. TUBERCULAR ABSCESSSES IN LUNGS.—Dr. J. D. Brown, of Strood, Kent, relates the following case.

Case. E. K., aged 39, had suffered for five years from occasional attacks of giddiness, pain in the head, and sickness, with numbness in one of the lower limbs. In December, 1849, and January, 1850, she laboured under symptoms of chronic inflammation of the brain, which appeared when she had scarcely recovered from a miscarriage. Her memory was impaired; there was paralysis of the left lower extremity, with weakness of

the right leg; there was occasional rigidity of the muscles of the lower limbs. Emaciation progressed to a considerable extent. On the 7th June, she was attacked with bronchitis, but recovered. On the 19th, she was seized with a paroxysm of breathlessness, which returned several times; and she died in one of these paroxysms on the 29th. Throughout this day and the preceding night, she fancied she saw deceased persons. Her consciousness never failed, though she had a dull, vacant aspect. She said that there was a sensation of "squashing" in the back part of the head, and that, when erect, she felt as if about to fall forward.

Post-mortem examination, forty-two hours after death. The skull was dense, and greatly thickened, particularly anteriorly and laterally. There were about three ounces of serum beneath the membranes; the ventricles contained but little fluid. The vessels of the *pia mater* were dilated: there was no disease in the arteries at the base of the brain. The cerebral convolutions were healthy, and moderately firm. There was white softening of the corpus callosum; the fornix and its crura were almost destroyed, and the peduncles of the pineal gland were completely removed by ramollissement: the crura cerebri in the vicinity of the pons Varolii, the superior vermiciform process, and the upper surface of the cerebellar hemispheres, were in a softened state. The medulla oblongata was sound. The heart presented an extreme degree of fatty degeneration. The lungs were emphysematous anteriorly, and contained numerous tubercular abscesses, filled with thin pus, and having no communication with the bronchi. The liver was large and fatty; the spleen extremely soft; and the kidneys also much softened.—*Medical Gazette*, December 13, 1850.

CVI.—COD-LIVER OIL IN JAIL-CACHEXIA.—MR. Caleb Rose, of Swaffham, Norfolk, has published some remarks on the scrofulous cachexia, common among prisoners, which he believes to differ from the ordinary forms of scrofula. The symptoms of the disease are these:—The man looks paler and thinner than usual; is very much depressed in spirits; has no appetite; sleeps badly; and has profuse night-sweats; there is slight diarrhoea; the pulse is quick, irritable, and feeble. The cervical glands are always more or less enlarged, and continue to enlarge very rapidly. In five years, three died in prison, two of very rapid phthisis, the third of tubercular peritonitis. The others who were seriously affected, were discharged before their proper time, and speedily recovered after their liberation. Those who suffered less were carried on to the end of their term of imprisonment by care and indulgence. Rather more than two years since, the use of cod-liver oil was commenced, and with the best effects. The two men who first took the oil had the cervical glands much enlarged (in one of them suppurating), and, as they had still to remain some months longer in prison, it was thought that they must have been discharged before the end of their term; however, after taking the oil a month, they improved steadily, and eventually left the prison at their proper time, in as good health as when they entered it. Since these two cases, there have not been any so severe, as the oil has been administered in good time to those presenting indications of scrofula; they have gained flesh and strength, and their health has apparently been entirely restored.—*Provincial Medical and Surgical Journal*, 1851.

CVII.—RARE CASE OF COMPLICATED PARTURITION. By JAMES GRAY, M.D., Perth.—On the evening of the 26th of February, 1850, I was summoned to attend Mrs. Y. in her first confinement. She resided at a distance of twelve miles from my residence in Perth. I found her in bed, suffering from a severe expulsive pain. The cry which escaped her led me at once to make an examination. In doing so I discovered, as I thought, the head of the child partly born, and covered, as is not unfrequently the case, by the membranes. After the pain subsided, I had time to make a more careful examination. The os externum was found to be thrust forwards and upwards to the front of the pelvis; the perineum greatly distended; the orifice of the rectum dilated considerably, exposing its mucous surface to the extent of an inch. The head presented in the second position; the membranes were entire. On introducing the index finger of the right hand into the rectum, I found that one of the child's hands lay upon the right cheek. Another pain soon followed, more fully stretching the perineum and opening the anus; without, at the same time, affecting the outlet of the vagina. To prevent the perineum from being injured, I placed the palm of my right hand over the anus and perineum, carrying my fingers into the vagina, so as to prevent the too sudden expulsion of the child. While thus engaged, I felt that something had given way; a gush of fluid followed, and the pressure of something solid against the palm of my hand. This I found to be one of the hands of the child, which had protruded itself through the walls of the vagina

and rectum, a little above the verge of the anus. The pain returning, I expected every moment, from the state of the parts, and from the powerful efforts made, that the perineum would give way. This was prevented by still carefully supporting the parts, retarding by counter-pressure the progress of the child, and thus giving time for the external parts to relax, which, in the course of half an hour, took place. The head, consequently, was gradually expelled, and, as it emerged under the arch of the pelvis, the hand also descended through the opening in the walls of the vagina and rectum, until it hung over the left nates of the mother. With the shoulders another difficulty now presented itself; this I managed by pulling the arm in the direction of the spine of the mother, and guiding it through the aperture with my left hand; while, at the same time, with my right I supported the head, and carried it forwards and upwards during the continuance of a pain. The shoulders were soon expelled, and the child was safely delivered. The cord was tied, and in ten minutes the placenta came away. A bandage, with a pad attached to it, was applied round the abdomen. On the injured part being examined, the rent appeared to commence a little above the verge of the anus, and to extend upwards for about half an inch; but the muscular fibres of the rectum had contracted, and reduced it to a mere fissure. It was carefully cleaned, and a piece of lint introduced into the vagina, to absorb the discharge and prevent it from passing between the lips of the wound. At the end of one hour I left her, with strict injunctions to keep herself quiet, and not to move about in the bed. Next day I learned that she had passed a comfortable night, and was as well as could be expected. She went on gradually improving; the faces were expelled *via naturalis*, not in the least tinged with blood. In the course of three weeks she was able to be up a little. Since then I have seen her frequently, and she expresses herself as being quite well.—*Monthly Journal of Medical Science*, Jan., 1851.

CVIII.—PROPOSED NEW REMEDY FOR PULMONARY PHTHISIS.—*ARUM TRIPHYLLUM*.—By DR. A. POIDEVIN.—The *Arum triphyllum* (class Aroideæ differing slightly from the *Arum vulgare*), is, in the United States, a popular remedy against chronic cough and slow fever. The compiler of the *Journal des Connaissances Medico Chirurgicales* has remarked in a note, that the remedy has also been adopted by several American doctors, principally by Drs. Barton and Bigelow. M. Poidevin having procured the plant in a fresh state in his own country (Mobile in Alabama), undertook to give it a trial. It is used in the following manner. An ounce and a half of arum cut into small pieces and put into half a litre of Hollands, is macerated during five days. The pungent quality does not dissolve, and the tincture has little taste. The patient takes a spoonful in a quarter of a glass of *eau sucrée*, every morning.

The paper appears to show that the author has only employed the arum in three cases of chronic pulmonary disease. He describes two cases, thinking it sufficient to say that the result was the same in the third. In the two cases, the rational symptoms were those of pulmonary phthisis in the first stage, but it is to be regretted, as to one at least, that minute stethoscopic details have not been given to render the diagnosis more certain.

The subject of the first case was a young lady, 22 years of age, whose sister died four months previously, of pulmonary phthisis. A rather abundant hæmoptysis was repeated three or four times. A fatiguing cough had succeeded: progressive emaciation, pain between the scapulae, nightly perspirations, continual fever, subcrepitant humid râle at the superior part of the right lung existed.

Different modes of treatment proved useless. To the patient was then given the tincture of arum. The fourth day the cough had decreased slightly; the sixth, there was no fever or perspiration, the cough was seldom heard, and appetite returned. Although the lung was partly impermeable to air, dyspnoea was only slightly pronounced. The arum was continued during six weeks. At the end of this time, the health was perfectly restored. There still remained a slight induration of the lung; but the respiration was heard well enough all over the chest, except at the level of the fourth rib. There still remained, although very seldom, a short dry cough.

The second case relates to a professor of literature, in whom a doctor had diagnosed pulmonary phthisis. M. Poidevin having been called in, he detected the following symptoms, the patient having been confined to bed fifteen days:—paleness and extreme emaciation; voice hollow and feeble; erratic, wandering pains in the chest; fever, perspirations, frequent cough, sputa resembling that which arises from the liquefaction of tubercles. Hæmoptysis had taken place some days previously. "The auscultation," remarks the author, "assured

me I was not mistaken in diagnosing pulmonary phthisis." During a short apyrexia the patient took some grains of quinine mixed with lactate of iron. The following day the fever was diminished, but the debility was extreme, and the face cadaverous. Tincture of arum was prescribed, with Bordeaux wine and roast meat. A week sufficed to procure relief, which the patient called a cure. Since then (the exact period is not known) the patient continues very well.

How much we are to allow as the effect of the arum, and how much as that of the tonic regime in the truly fortunate results of these cases are the real questions. At all events there is encouragement for further trials of the proposed remedy.—*Gazette Médicale de Paris*, 2nd Nov., 1850.

CIX.—PARALYSIS OF THE BLADDER FROM OVER DISTENSION AFTER DELIVERY. Reported by Mr. Furze.—E—C—, aged 20, was admitted into No. 1, Petersham Ward, under Dr. Lever's care, April 10th, 1850; she had been married three years, and had had two children. Her first labour was difficult, and terminated by the assistance of forceps; the child, a female, was born alive. Her second labour was long and tedious, but terminated naturally, the child, a male, being still-born. Twenty-four hours after delivery she was supposed to be suffering from an attack of puerperal peritonitis, the symptoms which existed being, apparently, of that character. Dr. Lever was requested to see her, and, on passing a catheter, drew off *seven* pints of urine, after which the symptoms of peritonitis disappeared; but the bladder, in consequence of over-distension, lost its expulsive power, and from that time, up to the time of admission (a period of nine weeks), she was unable to pass her urine, and required the use of the catheter morning and evening. For the first two weeks, the urine drawn off was very thick, contained a quantity of mucus, and was highly offensive; it afterwards, however, assumed a more natural appearance. The bowels were very sluggish in their action. The catamenia first appeared at thirteen years of age, and had always continued perfectly regular. She was tall, of fair complexion, apparently in good health, though suffering from debility, not having been able to get out of bed since her confinement. All the functions of the body appeared to be properly performed, with the exception of that of the bladder, over which she had not the least control; she was quite free from any pain or uneasiness about the pelvis. The uterus having regained its normal condition, and being free from displacement, as ascertained by a vaginal examination, the urine was high coloured, and slightly ammoniacal, but, in other respects, healthy; pulse 82, perfectly natural; tongue clean and moist. She was ordered to have an electro-galvanic current passed through the pelvis three times a week, and the urine to be drawn off night and morning.

Rx Tinct. ferri sesquichloridi, $\mathfrak{m}\mathfrak{x}$, et infus. quassiae ter. quotidie.

15th. She suffered from a good deal of pain for some time after having been electrified, without deriving any decided benefit in the state of the bladder; the urine, however, appeared to flow through the catheter rather more freely, and the bladder did not require so much pressure with the hand to empty it, as on her admission. Urine still rather offensive.

20th. The catamenia appeared this day, for the first time since her confinement; in other respects she was the same. She had regained no power over the bladder. The electro-galvanic current was ordered to be passed every day.

23rd. She left the hospital this day to attend as an out-patient, and in the evening was enabled to pass her urine for the first time; and never afterwards required the catheter. To be electrified daily.

30th. Still continued to pass her urine by voluntary efforts, but was compelled to do so frequently, viz. seven or eight times during the day, and two or three times at night; in health and strength she was improved, but complained of a fulness, and bearing down weight in the perineum. There was also a tendency to prolapsus uteri; the urine still continued offensive.

May 4th. She continued to pass her urine without any difficulty, and was now enabled to retain a natural quantity for a proper time without inconvenience. To be electrified three times a week.

Rx Acidi nitrici diluti $\mathfrak{m}\mathfrak{xv}$, ex decocto cinchonae ter. quotidie.

This patient is perfectly well, has full command over her bladder, does not micturate too frequently, and is again pregnant.—*Guy's Hospital Reports*.

CX.—REMARKABLE CASE OF COMMUNICATION BETWEEN THE STOMACH AND EXTERNAL SURFACE OF THE ABDOMEN. By WILLIAM ROBERTSON, M.D., F.R.C.P., Edinburgh.—Isabella Davidson, an unmarried woman, thirty-six years of age, was admitted to Ward 13 of the Royal Infirmary, on the 11th Novem-

ber, 1850. She gave the following history of her case:—She has resided all her life in the parish of Roxburgh, near Kelso, and has been accustomed to labour in the fields. Up to the age of fourteen, her health was remarkably good. About this period, however, she became subject to occasional darting pains in the left side of the epigastrium, and under the cartilages of the lower left ribs. These pains were not increased by pressure,—they continued to recur at intervals for seven years, and were accompanied with no signs of dyspepsia, except costiveness, eructations, and flatulent distension of the abdomen. Her food usually consisted of different preparations of oatmeal, of potatoes, milk, and occasionally of soup and boiled vegetables. Since she attained the age of fifteen, she has menstruated regularly. At the age of twenty-two, she gave birth to a child, after an easy labour. When twenty-five years of age, she recollects to have observed a soft elastic tumour (probably flatulent) between Poupart's ligament and the short ribs of the left side; it frequently shifted its place, and finally disappeared when she was twenty-six years old, after an attack of diarrhoea, which lasted for six months. Up to this period she was always stout and able for work; the diarrhoea did not prevent her from following her usual occupations, and her appetite continued good.

In 1842, she first observed a tumour in the left side of the epigastrium, not exceeding a pea in size. It was hard, painful, tender, but not discoloured; it increased steadily in size for two years, when it had attained the size of a very large orange. It then began to subside, and in about three months had completely disappeared. Pain and tenderness were still felt in its former situation for about another month (September, 1844), when a dark spot, of the size of a half-crown, made its appearance in the epigastrium. At this period the patient's general health first began to suffer; although able to shear at the harvest of 1844, and to engage in hard field labour, her strength and flesh became rapidly reduced. Her appetite still continued unimpaired.

On the night of October 22nd, 1844, while she was washing some clothes, she felt the black spot give way, and fluid trickle over the abdomen. She immediately stripped, found that a little blood and matter (?) had been discharged, and that the contents of her stomach were escaping by a rent in the black spot formerly noticed. She swallowed successively draughts of water and of milk, which gushed out in full stream from this orifice. She was seen next day by Dr. Francis Douglas, then of Kelso, now of the H.E.I.C.'s service. His interference was limited to simple dressing of the sore, and the application of a bandage, to prevent the escape of the food. The patient states, that when the dressings were removed, a sort of valve (mucous membrane?) could be seen closing the orifice, at a short distance from the surface of the abdomen. By the end of January, 1845, the aperture had completely cicatrised. It continued closed for about a year, during which time the patient was able to move about and engage in ordinary domestic occupations. She, however, continued to feel pain about the seat of the cicatrix, and was unable to work in the fields. Early in 1846 the cicatrix became red, small blebs made their appearance on its surface, and were succeeded by ulceration and re-establishment of the communication with the stomach. About the end of March, 1846, the fistula again cicatrised; but, in June, 1847, ulceration occurred for the third time, and the communication with the stomach has existed ever since. For the last three years she has lain almost constantly in bed, and has worn a piece of linen, secured with a pad and bandage, over the external orifice of the fistula. She has been seen at intervals by Mr. Stewart and Dr. Hamilton, of Kelso, but has used no medicine except purgative pills, which she takes frequently, and laudanum, which has been given now and then, in small doses, to allay painful sensations. Her usual diet has of late consisted of coffee, bread, steak,—of many plain and nutritious articles of food, eaten frequently, and in small quantity, without much salt or other seasoning. She prefers her food warm, and drinks very sparingly. She says she is apt to shiver when anything cold is swallowed; and distension of the stomach, more especially with fluids, causes irritation about the external opening. She is of healthy family, and quite unaware of hereditary predisposition to any disease.

These particulars, gathered by interrogating the patient herself, were confirmed by the statement of her sister, who accompanied her to the hospital.

Her condition, on admission, was as follows:—She is dark haired, and of a ruddy, healthy complexion. There is no appearance of hectic, cachexia, or even of discomfort. She is rather thin, but has lost little of her muscular strength. Temperature of the surface of the body natural, but easily lowered by exposure to cold. Pulse 70, natural. Respiration slow, and unembarrassed. Tongue clean, with a few slight transverse fissures. Appetite good. Food taken in small quantity at a time.

No thirst complained of. During the process of digestion, there is always more or less pain in the region of the stomach, and around the external orifice of the perforation. The bowels are habitually confined, and seldom act without the use of laxatives. The urine is secreted in small quantity; its density exceeds 1030; it is not coagulated by heat, nor on the addition of nitric acid. Menstruation continues regular. The patient occupies herself chiefly with reading and sewing. She is of cheerful disposition, and, for her station, remarkably intelligent. She sleeps well.

The external perforation is situated about two and a-half inches from the median line, and three and a-half from the umbilicus, close to the cartilage of the eighth left rib. It is of an oval form, and will admit an ordinary sized thumb. Its margin is rounded, depressed, hard, and red, presenting here and there minute points of ulceration. The surrounding integuments are, for the space of two inches around, red and indurated,—in a few points, ulcerated or excoriated. This appearance has been caused by the irritation of the parts during the patient's recent journey from Kelso. On passing the little finger deeply into the orifice, it meets with resistance when turned downwards and to the left side; in the direction of the pylorus it passes freely. The mucous membrane of the posterior wall of the stomach can be seen when the patient is placed in a favourable light, and when she takes a mouthful of milk it can be observed to flow over the surface opposite the external orifice.

The great similarity between the condition of my patient and that of Alexis St. Martin, the subject of Dr. Beaumont's interesting observations, suggested the propriety of repeating some of his experiments, and of instituting others which modern researches on the physiology of digestion render desirable. I accordingly brought the case under the notice of the Edinburgh Medico-Chirurgical Society, and with the assistance of a committee, appointed at their November meeting,* hope to have the opportunity of making such a series of observations as may seem compatible with the welfare of the patient, and which may at some future period be communicated to the profession. But as experiments on digestion can only be satisfactory if performed on a healthy subject, I have hitherto contented myself with regulating the action of the bowels by enemata and the use of proper diet, and with applying such mechanical contrivances as seem best adapted to promote healthy cicatrization, and to reduce the irritation of the integuments by restraining the escape of the contents of the stomach from the preternatural orifice. In this I have partially succeeded, by laying a piece of vulcanised caoutchouc over the hole, and securing over all a pad and broad bandage. The dressing requires to be occasionally shifted, to permit the escape of flatus, which often accumulates to a troublesome extent. The contents of the stomach have been frequently roughly examined about mid-day: they are always highly acid, and contain particles of flour, coagulated albumen, milk, and other articles, derived from the patient's usual breakfast of coffee, milk, bread, and egg, taken about nine A.M.

On the 4th December I probed the cavity with an elastic catheter, and from the examination then made I am induced to believe that the perforation communicates with the stomach through its anterior wall, not far from the great curvature, and probably about four inches from the cardia. Although introduced with great caution, the bougie caused (as in Dr. Beaumont's case) some little uneasiness or faintness.

About the same time my friend, Dr. J. Smith, kindly made a coloured drawing of the external appearances, which are copied from it with sufficient accuracy in the accompanying lithograph. It will be seen that the external orifice has somewhat diminished in size since my first examination of the case,—that its upper margin includes the cartilage of the seventh rib,—and that the cartilages of the ninth and tenth ribs (indicated by figures 9 and 10) are situated beneath and external to it.

The precise nature of the lesion which induced the successive perforation of the stomach and abdominal parietes is rather obscure. The most probable conjecture which I can offer is, that a chronic ulcer of the stomach occasioned, whether by perforation or otherwise, extension of inflammation to a limited portion of its external surface, and consequent adhesion to the abdominal parietes,—that thereafter an abscess formed external to the stomach, and discharged its contents into the viscus,—that the contents of the stomach, acting upon the walls of the abscess, ultimately caused the ulceration of the integuments.

As to the prospect of cure, I fear the case does not admit of remedy,—certainly not of surgical interference at present. The edges of the aperture could not be thoroughly approximated

without exposing or cutting away a portion of the cartilages of the seventh and eighth ribs, and although a flap of skin might easily be transplanted, so as to cover it, ulceration would, I believe, almost inevitably occur, from distension from within, and from the action of the gastric juice and ingesta upon its internal surface. There would, moreover, be a risk of exciting fatal inflammation, to which I should not feel justified in subjecting the patient. Palliative measures, such as are at present adopted, may succeed in further reducing the size of the opening, and, at all events, render the patient's existence more comfortable.—*Monthly Journal of Medical Science, January, 1851.*

CXI.—PELVIC TUMOUR COMPLICATING LABOUR.—M. C., aged 36, admitted under Dr. Lever, January 30th, 1850. She was a dark, strumous-looking woman, of middle stature, with long dark eye-lashes and deep brown hair. With the exception of slight temporary indisposition, she had enjoyed good, though somewhat delicate health, until within three years.

The catamenia made their appearance when she was sixteen, and recurred regularly, unaccompanied by pain, moderate in quantity, and of fair duration. At the age of twenty she married, and after the lapse of five months became pregnant. Soon after this, she experienced much difficulty in micturition, and each attempt was accompanied by such an acute smarting sensation, referred to the entrance of the urethra, that an ocular examination was thought necessary by her medical attendant. A small tumour was detected, situated at the orifice of the urinary canal, and removed by means of a ligature, when all her distressing symptoms were immediately relieved. Her labour was natural, and recovery quick. The catamenia returned at the next monthly period, but disappeared after the expiration of another five months, in consequence of her having again become pregnant. After going to her full period, she was with facility delivered of a living son. Her convalescence was rapid, the catamenia again made their appearance at the expiration of one month, to be in six months again discontinued, in consequence of a third pregnancy. During gestation, she suffered from pain and oppression of the loins, accompanied by a sense of weight and stiffness in the abdomen and legs, all which symptoms increased as she approached the period for her confinement, when she was prematurely, though rapidly, delivered of a child, which only lived for ten hours. Her recovery was speedy, and for the fourth time she found herself with child. Through the whole period occupied by this pregnancy her health was impaired, and the symptoms before mentioned again showed themselves. She, however, went the full time; the labour was easy and natural, but the child died after the lapse of a year and a half. At the expiration of nineteen months she gave birth to a full-grown male child, the labour being easy and quick, but accompanied by pain and numbness in the thighs and legs; she recovered speedily; and after the lapse of twenty more months she was safely delivered, at the full period, of her sixth child. She subsequently enjoyed good health, the catamenia came on after their accustomed interval, and continued regular for the space of three years, nine months after which her seventh child was born with much facility. After the interval of six months, pregnancy was again established, but her health now began to give way; she became languid and restless, was oppressed with pain and weight in the abdomen and loins, and was much weakened by a profuse red discharge which flowed from the vagina, and which was not relieved by the use of astringent injections. At the seventh month of gestation labour came on, and a fœtus, which had been for some time dead, was expelled. Profuse hæmorrhage followed, from the effect of which she stated she had never perfectly recovered. Twelve months ago she was taken into the hospital, under Dr. Hughes, suffering at that time from irritable stomach, intense paroxysmal pain in the stomach, jaundice, and gall-stones, two of which she passed during her stay in the hospital. She received relief, though the pain in the abdomen still continued, and from that time she was scarcely able to leave her bed; but, notwithstanding, she again became pregnant, and was six months advanced, when her symptoms became much aggravated, and the pain more intense and persistent.

On admission she complained of general languor and debility, of great pain in the abdomen and loins, accompanied by a sense of weight and oppression, aggravated at intervals, and increased by the movements of the fœtus; but more especially so by any attempt at defecation or micturition, when she experienced intense and excruciating agony. The countenance was dull, of a pale sallow hue, and anxious, eyes surrounded by a broad and gloomy halo, lips blanched, tongue pale, sodden, flabby, and indented; pulse small, quick, thready, and irritable; skin moist and supple; breathing free and easy; sounds of the heart normal;

* The committee consists of Mr. Syme, Mr. Goodsir, Dr. Christison, Dr. Bennett, Dr. Douglas MacLagan, and Dr. W. Robertson.

digestive functions much impaired; appetite bad, and after food some nausea, with an inclination to vomit; the assimilative powers also seemed somewhat diminished, for lately she had emaciated much. Her nights were restless, and sleep only procured at intervals; bowels constipated, and moved with difficulty; urine natural, both in quantity and quality; no vaginal discharge. The uterus extended up above the umbilicus, and in it the fetal movements could be distinctly felt by others, as well as by the mother. Uterine soufflé loud and sonorous in both inguinal regions; fetal heart could occasionally be heard midway in the right of the line extending between the umbilicus and pubes. On making a vaginal examination, *a large firm tumour of the size of two ordinary fists could be felt attached to the posterior portion of the uterus, the os and neck of which were tilted close to the symphysis pubis.*

Feb. 1st.—The bowels had been relieved by means of a dose ofenna, the passage of the feces being attended with intense pain.

8th. She continued to improve, as to her general health, until this day, when she was much frightened by a sudden and copious discharge of a quantity of water, but not accompanied by any sensation, as if of micturition. The movements of the fetus had been very active, and there was considerable pain in the womb, of a dull continuous character, and not attended by any manifest hardening or contraction. The fluid was nothing more than urine.

With the exception of a slight attack of diarrhoea, accompanied by tenesmus, and some febrile symptoms, but speedily removed by means of dilute sulphuric acid, with decoction of simarouba, she progressed most favourably. The countenance assumed a better aspect, the animal spirits became restored, the tongue firmer, the pulse slower, and possessed of some volume, while sleep was more easily attainable, the appetite less capricious, and the stomach more inclined to retain its food.

17th. On making a vaginal examination, Dr. Lever found the tumour so much increased in size, that he thought it requisite to induce premature labour (the patient having then reached seven months and a half), and more so as the enlargement was much softer than formerly,—much more like a malignant mass, giving exactly that impression to the finger which is experienced on touching a sweetbread; the tumour extended much lower down on the right side than on the left; it could not be moved by manipulation, and easily broke down under the pressure of the finger. So much room was now occupied by it, that there was scarcely space for the tips of two fingers between it and the symphysis, just above, and close to which the os uteri could be felt somewhat patent, but without any appearance of a presentation.

One o'clock p.m. The membranes were ruptured by the introduction of a long silver catheter into the womb, and upon its withdrawal a little blood and a few drops of water followed. The sounds of the fetal heart could be heard at intervals.

March 1st. One o'clock p.m. A very large quantity of liquor amnii had dribbled away, the os uteri is rather more patent, but no presentation as yet to be detected. She felt very comfortable, had passed a good night, and was remarkably cheerful. The intestines and bladder had been freely relieved.

Eight o'clock p.m. The uterus was now dilated to the size of half-a-crown, the os was very soft, and evidently inclined to open readily, the vagina well lubricated, cool, and distensible. The tumour, however, remained in the same situation. Upon making a careful scrutiny, the head of the child could be distinctly felt, having by its side either a hand or a foot, but it is still so high up as to render the diagnosis between them impossible. The patient had a quick pulse, and though the pains now came on regularly every fifteen minutes, or so, she still retained her cheerful demeanour, without any sickness, or abdominal distress.

Ten o'clock p.m. The uterus had descended somewhat, the os was considerably more dilated, while the tumour, especially to the left, had receded higher up into the pelvis.

Twelve o'clock p.m. The uterus now fully dilated, but still very high up; on making a careful examination, five fingers or toes, in a parallel line with one another, could be counted, while still anteriorly there appeared to be one of larger calibre, which, at first, I considered to be a thumb; but remembering that it was not probable that there would be five fingers besides a thumb, I instituted a more searching investigation, the result of which was to assure me, that both feet were presenting with the head; the pains now progressed steadily, and followed one another in quick succession, the tumour to the left receded as the child descended, while to the right it gave way under its pressure, and about one a.m., I had the satisfaction, with the aid of slight traction, of delivering her safely of a dead child. The placenta came away speedily without hæmorrhage, and the uterus contracted rapidly and firmly. The patient was delighted with the

issue; the pulse 100, and rather feeble; tongue moist, in all respects she seemed comfortable.

A little brandy and water to restore the pulse.

R Pulv. opii, gr. j. et Pergat.

2nd.—Eleven o'clock a.m. The after-pains had been rather sharp, no pain in the abdomen on pressure; skin moist and supple; tongue moist and clean, countenance good; the bladder had been freely relieved: the lochia were natural.

5th.—Was much the same; the bowels had been freely relieved by means of castor oil, and little or no pain attended defæcation. The breasts were painful and swollen, and Dr. Lever ordered them to be strapped.

8th.—She complained this morning of pain in the abdomen, to the right of the umbilicus, augmented by pressure: countenance pale and anxious; skin rather hotter than it ought to have been; tongue moist and irritable; pulse 110, and irritable; bowels relieved once since the 5th.

R Cataplasma Lini.

Olei ricini, ʒj; Tinct. opii, ℥ xxv, statim.

9th.—Much better, the bowels had been freely acted on; the pulse was slower, and the countenance less expressive of anxiety.

R Pulv. Doveri, gr. v, 6tis horis.

From this time, with slight temporary interruptions, she progressed most favourably; her health being better than it had been for a year, previous to her admittance; defæcation and micturition were attended with some difficulty, but little or no pain; the tumour extended high up on the left side of the abdomen, nearly to a level with the umbilicus, and was very firm, and without pain on manipulation. On examination per vaginam, it proved to be larger, firmer, and lower in the pelvis than before delivery. Some few days since I again saw her, she was enjoying capital health; but had recently suffered from some amount of fear in consequence of her supposing that she had again become pregnant. This, however, fortunately for her, proved to be unfounded.

In this case I believe I was justified in inducing premature delivery; the tumour was increasing rapidly, and if the patient had gone on to the termination of the ninth month, I fear the difficulties I should have had to encounter would have been so great, and the danger so formidable, that her life would have been placed in great jeopardy. She occasionally visits the hospital, as an out-patient, enjoying better health than she has had for years.—*Guy's Hospital Reports*, 1850.

CXII.—CYANOSIS, PRODUCED BY TRANSPOSITION OF THE ORIFICES OF THE AORTA AND PULMONARY ARTERY. By CARTER P. JOHNSON, M.D., Prof. Anat. and Physiol. Med. Dep. Hampden Sidney College, Richmond, Va.—On the 17th of May, I was requested by Dr. G. G. Miner, of this city, to aid him in making a post-mortem examination of a male mulatto infant, aged precisely two months, which had suffered since its birth from some disorder of the circulation and symptoms of cyanosis, and which had died the previous evening. I learned from the Doctor that the cyanosis was *permanent*, being always present to a greater or less extent, though considerably increased by any unusual exertion on the part of the child.

On proceeding to the autopsy, the body presented externally, nothing worthy of special notice. Though rather under size, it appeared to have been tolerably well nourished, and to differ but little in plumpness and rotundity from the bodies of other children of the same age.

Upon opening the thorax, the cavity of each pleura was found to contain from two to three ounces of serum; the surfaces of the pleura were healthy. The lungs were but imperfectly inflated, though sufficiently so to float upon water. Instead of presenting the very white colour of the child, they presented, except in a few spots where a larger amount of air had obtained access, the dark purple colour of a highly congested or apoplectic lung.

The pericardium was healthy, containing no more fluid than usual. The heart presented the usual form, size, and direction; but, upon examining the upper portion from which the aorta and pulmonary artery emerge, an unusual relation of their vessels was observed. Instead of finding the pulmonary artery lying in front of and concealing the orifice to the aorta, the two vessels lay side by side from their origin to the division of the pulmonary artery, the aorta lying on the *right* and somewhat in front, the pulmonary artery on the *left*, a little behind.

On examining the interior of the cavities, beginning with the right auricle, the venæ cavae and coronariae were found empty as usual. The *foramen ovale* was *patulous* by an orifice oval in shape, the vertical diameter of which measured about four and a half lines, the transverse diameter about two and a half lines. The *musculi pectinati* were developed to a much greater extent than usual, large fleshy pillars, resembling the *columnæ carnae* of

the ventricles, passing down from the upper to the posterior wall. The right auriculo-ventricular orifice was natural, the valves presenting the usual tricuspid arrangement. The walls of the right ventricle were very nearly as thick as those of the left. The columnæ carneæ were larger and more fully developed than those of the left side, though the latter presented a much more red appearance. From the upper and anterior portion of the cavity of the right ventricle the aorta took its origin, provided, as usual, with its three semilunar valves. With the exception of its orifice, and the consequent change produced in the first portion of its course, the distribution of the aorta was normal.

The left auricle received, as usual, the pulmonary veins, and in its interior presented on the septum the opening of the foramen ovale. In other respects, its anatomy was normal. The left auriculo-ventricular orifice presented the usual mitral valve. The left ventricle presented no peculiarity in its structure; the septum ventriculorum was complete. From the upper and posterior portion of the cavity of the left ventricle, just behind the posterior fold of the valve, the pulmonary artery took its origin by a free and patulous orifice. From its origin it proceeded upwards and to the right for about an inch, when it divided into three branches, the right and left having the usual course and distribution of the pulmonary arteries, the middle branch (the previous ductus arteriosus) piercing the concavity of the arch of the aorta. The pulmonary branches were pervious, and not materially smaller than usual.—*American Journal of Sciences*, No. xl. page 371.

CXIII.—ON PLEURISY IN CHILDHOOD. By Dr. HENOCB.—Notwithstanding the ease with which pleuritis may be diagnosed, this disease is more frequently mistaken than almost any other occurring in childhood. The cause of such a misconception is probably to be sought in a superficial physical investigation, or, perhaps, also in the absence of any very well-marked characteristics of the affection; and that such is the case, will, we think, be made evident by the following illustrations:—

1st Case. *Pleuritis masked by Cerebral Symptoms. Transition to a Chronic State. Recovery.*—O. N., a fine healthy boy, aged four years, fell with violence with his head against the corner of a German stove. He continued in good health after this accident, with the exception of a tendency to diarrhoea, which, however, had been observed prior to his fall. Some time afterwards, violent fever supervened on the sudden cessation of the diarrhoea, followed by an attack of convulsions, accompanied with unconsciousness. When seen by Dr. Henoch an hour after the attack, the child was drowsy and his countenance flushed. He complained of violent headache, let his head fall back whenever it was raised, and could not stand. The extremities were occasionally slightly convulsed; he had also, from time to time, a slight, short cough. The skin was very hot, the head especially so; the pulse 160. Six leeches and cold fomentations were applied to the head. Four hours afterwards (at 2 P.M.) he had a second attack of spasm and even convulsions, with somnolence, which was preceded by a flush on the left cheek. The urine deposited a white sediment. The child was able to sit up and play in the evening. There was no photophobia. The pulse 133. An injection was ordered, and 2 grs. calomel given every two hours. The boy complained of heat, and slept restlessly; vomiting occurred once in the night, and frequently throughout the following day. As the calomel had not proved efficient, a dose of *Infus. senna, c. syrup. domestic.* was prescribed, which produced several fluid evacuations. He occasionally uttered a loud and sudden scream. The fever continued the following day, when the pulse was 120, the tongue coated, the face flushed, especially on the left side. *Aq. oxymuriat.* was administered.

The disease exhibited little alteration for sixteen days, for although the cerebral symptoms abated in intensity, the pulse did not fall below 120. The fever increased towards night, when there was also some cough. On the 16th day a violent movement of the nostrils directed attention to the respiratory organs; on examining the chest, a faint, hollow tone was heard at the lower and middle part of the right side of the thorax, more especially in a posterior and lateral direction; the respiratory sounds could not be heard, and there was an absence of respiratory movement on that side with perceptible dilation of the side, and a bulging of the intercostal spaces, together with obvious indications of a strong pleuritic exudation. There was considerable pain on the right side of the thorax. The pulse 124; respiration 60. The urine clear, and copious in quantity. Eight leeches were applied to the seat of pain. *Unguent. ciner.* applied externally, and *Infus. digital.* and *ammonia* given internally.

This mode of treatment allayed the respiratory disturbance, and after a short time the respiratory sounds were again distinctly heard somewhat further back, but at the same time incipient symptoms of hectic fever were manifested. The patient was

ordered to drink seltzer water and to take a diuretic mixture, an iodine ointment was rubbed in, and small doses of calomel and digitalis given to remove the constipation present. A blister was also applied in order to promote resorption, but was allowed to heal at the end of a week, owing to the excessive irritation to which it gave rise. It was found after a few days, that the above mode of treatment might be laid aside, and more strengthening means (such as quinine) employed with decided benefit. The nightly perspirations continued however. At the termination of a month the percussion sound was but slightly dull, the respiratory sounds were audible in all parts of the thorax, although very faint at the lower parts. At the close of the second month the fever and all functional disturbance had ceased; a more nourishing diet was allowed, and *Ol. jecoris* given by way of an after-cure.

Several months afterwards a depression of the posterior wall of the right side of the thorax was first discovered, and at the end of a twelvemonth, a similar depression was detected in the anterior wall; and with the exception of a slightly dull percussion tone in the lower parts of the chest, and an indistinct respiratory sound, no symptom of disease was observable in this healthy-looking child.

In this case, the cerebral symptoms induced by the accident that occurred at the commencement of the pleuritis, were so prominent as naturally to attract the largest share of the practitioner's attention. The inflammation of the serous membranes would appear moreover to furnish sufficient cause for the nervous affection, and at first sight to indicate the existence of meningitis. The further progress of the disease, or perhaps a *post mortem* examination only betrays the presence of pleuritis or pericarditis.

Case 2.—L. V., a thin girl, aged 11 years, who had frequently been affected with swelled glands, violent head-ache, combined with photophobia and vomiting, and palpitations of the heart and dyspnoea fell suddenly to the ground in a fainting fit. On recovering her consciousness, the child complained of violent head-ache, which continued throughout the following day, accompanied with abundant bilious vomiting; together with cough, acute pain in the right side, and high fever. Cupping-glasses were applied to the right side of the chest, and a solution of nitrate of potash prescribed. A physical examination gave indications of a pleuritic exudation, with continued inflammatory irritation on the right side. By an energetic use of antiphlogistics, the child was perfectly cured at the end of six days.

Although the disease was not here accompanied from its early origin by convulsions, as in the first case, the symptoms were obviously of a nervous character. Rilliet and Barthez observed head-ache and bilious vomiting during the three first days of pleuritis in the majority of their patients.

Physiology teaches us to trace the origin of convulsions arising from irritation of the nerves of sensation to a reflex action of the spinal cord. A similar explanation applies to the cerebral affections in question, inasmuch as the nerves of the serous membrane, being excited by the inflammatory irritation, and acting in co-operation with the spinal cord, give rise to motor disturbances in delicate women and children.

The lancinating pain in breathing and coughing, which has usually been regarded as the characteristic symptom of pleuritis, was entirely absent in the first case. It is well known, however, that this symptom does not invariably occur in adults, and is sometimes felt only on the unaffected side, and we cannot, therefore, regard it as of any great importance in children, from whom we cannot, moreover, expect any very definite indications as to the seat of pain.

In considering the mode of treatment adopted, we observe that the small doses of calomel and digitalis, given in the first case, had to be discontinued at the end of twenty-four hours, in consequence of the bloody stools induced by their use; and this circumstance seems to confirm the views advanced by Golding Bird, and others, that the greenness of calomel stools depends upon the blood, and not upon the bile mixed with them.

The irritation excited by the blister is a symptom frequently observable in children, and should, therefore, prompt us to employ vesicatories with extreme caution. Graves has well observed that blistering plaster frequently affects children in the same manner as wounds, inducing sleeplessness, delirium, and a whole train of symptoms analogous to those of traumatic delirium.

Doctor Henoch regards external means as of no value in promoting the resorption of pleuritic exudations, since the resorbing process is effected perfectly well without them. They are even injurious, when, as in the case of blisters, they increase the weakness and anæmia induced by the process of exudation. The indication for their use is fulfilled by the internal administration of digitalis and other diuretics. External means are indicated

when the diuresis has ceased, and the urine is scanty, turbid, and charged with a sediment, as occasionally, although not invariably, occurs in empyema. They can be of no use where the urine is clear and copious; and still less so in the more advanced stages of the disease, when there are symptoms of hectic fever; for here the great prostration and exhaustion imperatively demand a tonic mode of treatment, and alike counter-indicate the use of diuretics or aperients. Quinine and cod-liver oil, combined with a vigorous diet and country air, will afford far more satisfactory results in this stage of the affection, than the most esteemed medicines for inducing resorption.

Case 1 proves the fallacy of the opinion advanced, that the thoracic wall does not fall in after the resorption of the pleuritic exudation in children.

The continuance or even recurrence of the cough, during the process of resorption of an empyema, is a frequent, although by no means invariable indication of a tubercular formation in the unaffected lung, for even bronchial catarrh may continue its course undisturbed during the process of resorption.

Case 3.—K. G., a boy aged six years, was brought to Dr. Henoch, as a phthisical patient. The disease was said to have begun two months before his admission, with violent fever, cough, and pain in the chest, which had gradually subsided after the use of antiphlogistics, leaving only a cough accompanied with expectoration. The boy was pale and much emaciated, the skin and muscles flabby. A physical examination showed an absence of respiratory movement on the right side, with slight dilatation on that side, and with slight bulging of the intercostal spaces, also a dull hollow percussion tone in the whole thoracic region, excepting only the upper part of the back, where a faint respiratory murmur was perceptible. The left side of the chest gave a sonorous percussion tone, the respiratory murmur being normal on the anterior surface, but masked on the posterior side by a remarkably loud vesicular mucous rattle; there was abundant diuresis, fever towards evening, and nightly perspirations.

The presence of pleuritic exudation on the right side could not be doubted, while, moreover, the state of the left lung, the evident scrofulous diathesis of the patient, the abundant and suspicious looking sputa, the hectic fever, and the increasing emaciation might easily lead to the suspicion of tuberculosis. One important symptom was alone wanting, in the absence of all dullness on percussion, especially in the upper part of the thorax. There was not either any indication of bronchial respiration or bronchophony. Infusa-decoctum rad. senegæ, quina, and ext. juniperi were prescribed, and continued for ten weeks, when the respiratory murmur was again audible on the whole of the right side of the back, while the sound on percussion was sonorous. No change was as yet perceptible on the anterior surface; there was still considerable cough and purulent expectoration; and the respiration was laboured, especially after motion. The diuresis continued abundant, the hectic fever had disappeared. A tonic mode of treatment was adopted; and at the termination of six months the exudation was perfectly resorbed, and the right side of the thorax correspondingly depressed. The left lung also presented a perfectly normal condition, and the boy had, in every respect, recovered his health.

Doctor Henoch has remarked that in the many cases he has observed, that the exudation becomes resorbed in children under suitable methods of treatment. He has never found it necessary to proceed to paracentesis of the chest. Where tuberculosis exists, little hope can be entertained of a favourable result, for the pleura with the exudation appertaining to it, becomes the seat of tuberculous depositions; but, on the other hand, where the disease is not complicated by the existence of tubercles, cases that appear to be past all hope of amendment frequently terminate favourably, as Dr. Henoch has observed in the case of infants, no less than older children.—*Journal für Kinderkrankheiten*.

XCIV.—NEURALGIA OF EIGHTEEN YEARS' STANDING CURED BY AN OPERATION. BY DR. BUCKMINSTER BROWN.—Mrs. R. had suffered for eighteen years with pain and tenderness of the thumb of the left hand. She could not trace it to any injury. About a year previous to my seeing her, she had had a severe labour, and had miscarried at the eighth month. From that time, the pain and tenderness had increased to an alarming degree.

The tenderness of the part above the second joint was at this time exquisite, and the pain was extreme both night and day, with but rare and irregular intermissions. It commenced in the neighbourhood of the internal corner of the root of the nail, and extended up the side of the thumb, through the hand up the arm to the shoulder, and terminated in the back of the neck, and was

reflected on to the breast. If the thumb received an accidental knock, the whole arm would be convulsed, and the pain become so intense as to produce faintness. During these paroxysms, she described the arm as assuming a blue appearance.

On examining the thumb, I found it somewhat swollen, and a slight degree of blueness around and beneath the nail, and that in addition to the excessive tenderness of the thumb, there was a considerable degree of soreness along the course of the median nerve. There was no marked tenderness of any of the dorsal or cervical vertebrae. Thinking, however, that it was possible the difficulty arose from some irritation or inflammation about the roots of the nerves, the treatment was commenced by applying a blister to the spine, at the point indicated. This was kept open with an irritating ointment, and sprinkled every second night with sulph. morph., and a cathartic was given every second day. About the same time, she took carb. ferri two or three times a-day.

For two or three days after commencing this treatment, the pain in the arm was increased. Antimonial ointment was rubbed along the course of the nerve. The tenderness in the arm gradually decreased, but continued about the same in the thumb. Leeches were now applied to the dorsal region, which afforded very considerable temporary relief.

The pain and tenderness, however, returning to its fullest extent, a blister was applied to the thumb itself, entirely enveloping it, and this, when dressed, was sprinkled with morphia. A small abscess formed on one side of the thumb; this was opened and touched on its internal surface with lunar caustic.

The thumb was now decidedly less sensitive. During treatment she took extract of conium, in gradually-increasing doses, but without any essential improvement in the symptoms. As the dead skin peeled off, and the new formed, the sensitiveness returned, and the pain became as severe as ever.

As the list of remedies from which I thought there was any chance of deriving benefit was now about exhausted, I decided to excise a portion of the internal digital nerve of the thumb, as it was in the ramifications of this nerve around the root of the nail and side of the thumb that the disease appeared to be seated. This was done December 18th, with the assistance of Drs. J. M. Warren and Morland.

The patient being etherized, an incision was made from the internal metatarsal head of the first phalanx of the thumb, to the internal tuberosity of the phalanx, about one inch and a third in length. A dissection was then made to the bone, and without much difficulty the nerve was seized, and a piece about one inch and one-third in length was removed. The thumb had always been so exquisitely sensitive that I had never been able to make a satisfactory examination until she was under the influence of ether. The next day, the extremity of the thumb was still very painful and sensitive; but there was no pain or tenderness below the place operated upon, or down that side of the thumb, which before had been the spot the most painful and susceptible. So far as this branch was concerned, the operation was of course successful. The relief, however, was not so complete as had been hoped, and a considerable degree of pain and susceptibility still continuing through the winter, another operation was decided upon. The patient being again etherized, a puncture was made above the most sensitive spot, just clearing the joint. A long thin knife was then introduced anteriorly and posteriorly, and all the parts from the skin to the bone thoroughly divided, thus semi-girdling the thumb; another puncture was made on the other side, and the same operation repeated.

March 13th. The last operation has been attended with complete success. The extremity of the thumb below the incision, that is, below the second joint, is perfectly numb, and there is no pain in the thumb or hand.

April 16th. Mrs. R. has had no return of pain in the thumb or hand, and all that remains to remind her of eighteen years of suffering is a slight shooting pain across the chest at distant intervals, on exposure to cold, &c.

A case somewhat similar to the above is on record, in which the disease was also in the thumb, and was the consequence of a puncture from a shoemaker's awl. In this case, the diseased nerve was cut down upon, and a small tubercle (neuroma) was found and removed with the nerve, to which it was attached, and of which it formed a part. The operation was attended with success. In the case above related, no tubercle was discovered. Previous to the last-mentioned operation upon Mrs. R., I was not aware that this method of operating, by destroying all the nerves that go to a part, had ever been followed. I have since learned that Dr. J. C. Warren had many years before operated in a similar manner, and with a like successful result.—*American Journal of Sciences*, No. xl. page 323.

CXV.—ON THE USE OF CORROSIVE SUBLIMATE IN HYDRO-CEPHALUS ACUTUS. By Dr. WEISSE, of St. Petersburg.—The inefficacy of the many various methods of treatment that have been adopted in hydrocephalus acutus, determined Dr. Weisse to try bichloride of mercury, which had been first recommended by Dr. Rauch of St. Petersburg, subsequently noticed in an article in 'Rust's Magazine,' by Dr. Spiritus, "On the use of this medicine in nervous fevers accompanied with marked cerebral disturbance," and still more recently by Dr. Rau, who employed it with success in two cases of hydrocephalus, in which all the usual symptoms of effusion were present.

Dr. Weisse has employed this mode of treatment, with similar benefit, in fifteen children, of which four seemed hopeless cases. His mode of prescribing it is to give, every two hours, a dessert-spoonful of a mixture of one grain of corrosive sublimate in four ounces of distilled water. It rapidly induces an increased discharge of urine, and a decided amelioration of the cerebral condition.

Dr. Weisse calls attention to an assertion made by Mialhe, that calomel becomes converted in the body into corrosive sublimate and metallic mercury; whence we may probably ascribe the noted efficacy of calomel in hydrocephalus to the bichloride thus formed. —*Journal für Kinderkrankheiten*, 1850.

CXVI.—ON THE APPLICATION OF COLLODION IN BURNS. By Dr. LIMAN, of Berlin.—Doctor Liman employs collodion with the most favourable result in all stages and degrees of burns. He has found that it allays the pain, and forms a protecting cover, preventing the access of the air, and allowing of the manipulation of the burnt parts and the use of cold applications. A considerable amount of smarting is indeed felt on first applying the collodion with a camel-hair brush; but this is speedily followed by great alleviation, and the healing process is completed without further suffering. The application must be repeated as often as the collodion cracks. Dr. Liman records the case of an infant who recovered perfectly within ten days, after having had the fore-arm and hand severely scalded with boiling water. A servant girl, whose finger had been severely burnt, was able to wash clothes with the coating of collodion on the burnt part.—*Casper's Wochenschr.* 1850.

[It may be observed that a favourite remedy for burns in the south of France, is an ointment, consisting of 100 grammes* ol. oliv., 75 grammes lime water, 25 grammes extr. saturni, 5 grammes liq. amm. caust. It should be kept in porcelain vessels, and be well shaken before each application. The good effect of lime liniments in burns has been noticed in the 'American Journal of Medicine,' 1850, where it is further recommended to cover the parts with cotton wool steeped in oil, by which all adhesion to the skin is prevented, and ice-bags may, if necessary, be used over the cotton wool applications. This, however, is much the same as our ordinary British practice.]

CXVII.—ON THE EMPLOYMENT OF URATE OF AMMONIA IN CHRONIC ERUPTIONS OF THE SKIN, AND IN PULMONARY TUBERCULOSIS. By PROFESSOR BAUR.—Professor Baur some time since drew attention to the admirable results that may be obtained both internally and externally from the use of urate of ammonia, from the action it exerts on the general investments as well as on the mucous membrane of the respiratory and digestive organs. It is only useful in chronic eruptions of the skin and in pulmonary tuberculosis when employed *externally*, and we shall limit our observations to this form of application.

In *chronic cutaneous eruptions* it is used in the form of an ointment, consisting of cerat. simpl. ℥i., ur. ammon. ℥j.; which is applied night and morning with a camel-hair brush, to avoid the irritation induced by the friction of inunction. This method of treatment is speedily followed by a remission of the nervous irritability, and the burning and stinging sensation; while the scales and crusts fall off, and the redness of the skin rapidly disappears. The exanthema usually disappears in the course of from one to three weeks. This application has been most successfully employed in eczema and impetigo; it was not equally efficacious in psoriasis, and its effect was decidedly injurious in acne. The general symptoms, as fever, pains in the limbs, &c., diminished with the local symptoms. Where the surface of the skin is much inflamed, the use of this remedy must be preceded by blood-letting, fomentations, &c., to reduce the inflammation. All frictions must be avoided as counteracting the sedative action of the remedy.

Professor Baur highly commends the efficacy of urate of ammonia in pulmonary tuberculosis. His method of employing it is to rub a tea-spoonful of the above ointment, night and morning alternately, on the anterior and posterior surfaces of the

thorax. He has found this treatment very successful, in rapidly diminishing the excessive sensibility, allaying the sharp pain and fever, arresting the exhausting perspirations, and rendering the respiratory movements more regular, while the patients improved in general appearance. The good effects of the remedy were very strongly marked, when used in the early stages of the affection, while it presented no favourable results in the latter stages. Its use is counter-indicated where there is inflammation of the lungs or heart, or where there exists any other heart disease.

In conclusion, Professor Baur observes, that *guano*, which consists principally of urate of ammonia, has been recently employed in America with favourable results, in leprosy and other skin diseases.—*Jen. Annalen*, vol. i. no. 4.

CXVIII.—CENTRAL LACERATION OF THE PERINEUM. By Dr. THATCHER.—Mrs. C—, in her first pregnancy, had been in labour for some hours previous to her sending for me. The first stage was over, and the head advancing correctly in the pelvis, and nearly on its outlet. The parts were well relaxed; the pains moderate; but the patient unhappily most restless and impatient,—in fact, scarcely controllable. The sacral part of the vagina appeared much deeper than natural, and the head was constantly pressing backwards forcibly, as if wishing to be extruded through the posterior part of the perineum and anus, instead of the superior and natural direction. As the perineum distended, it was quite evident that it was unusually elongated; the set of the pelvis reminded me much of that of the Hottentot Venus, pressing pubis and sacrum *out* of the ordinary line. Every exertion was made to guide the head superiorly to its proper position by the fingers, but this was of little use; and before the forceps could be employed, a sudden terrific pain, aided by the *over-exertion* of the patient,—to my surprise and great distress, and despite of every retarding exertion,—forced the head through the perineal space, between the lower commissure of the labia and the anus, keeping the lower frænum of the labia entire, as also, fortunately, the sphincter ani. The body was extracted in the same manner, as also the placenta. The patient was told that she had hurt herself by this unhappy exertion.

In the afternoon the parts were examined, and the above statement confirmed. The divided perineum was uniting at its edges, and appeared like two portions of a saw closing. They were kept united by ligature, and healed most favourably. The vagina also was kept clean, and after a fortnight all the parts were in their normal state. I have heard of two other similar cases, but this rare case is one evincing what may occur in any deviation from natural conformation, in defiance of the best care and aid.—*Monthly Journal*, Jan., 1851.

NOTICES TO CORRESPONDENTS.

Communications have been received from—

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EDWARD HALL, Esq., Dalton-in-Furness.

GEORGE GIBSON, Esq., Ulverstone.

To all these Gentlemen the best thanks of the Editors are due.

ERRATA IN LAST NUMBER.

Page 8, line 11, for "University College," read "Guy's Hospital."

METEOROLOGICAL TABLE FOR THE WEEK ENDING JANUARY 4, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	TEMPERATURE OF AIR.						MEAN TEMPERATURE.		Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.	AUTHORITIES AND NAMES OF OBSERVERS.
			Highest.	Lowest.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean.	Evaporation.	Dew Point.					Direction.	Strength.	Number of days it fell.	Amount fallen.		
Torrey	49° 11'	6° 36' W.	51.3	45.0	51.3	47.4	3.9	49.9	48.7	47.4	3.9	0.3	0.928	53.9	S.W. & S.E.	1.5	4	0.50	8.1	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey	49° 33'	2° 40' W.	53.5	45.0	53.1	46.1	7.0	50.1	48.3	46.3	3.8	0.5	0.879	53.9	S.W.	5	5	0.91	9.4	Dr. Hoskins, F.R.S., M.B.M.S.
Truro	50° 17'	2° 40' W.	55.0	48.0	54.0	52.6	44.0	56	49.0	48.3	47.4	0.2	0.960	53.8	S.S.W.	2.2	5	0.56	7.4	Dr. Shapter, M.B.M.S.
Uckfield	50° 43'	3° 41' W.	56.0	50.0	56.0	54.0	6.0	56.0	45.0	43.3	3.9	0.2	0.875	54.2	S.W.	1.7	3	0.42	9.5	C. L. Prince, Esq., M.B.M.S.
Greenwich	51° 28'	0° 5' E.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.913	54.0	S.W.	1.0	4	0.38	—	From Reg-Gen. Report.
Lewisham	51° 52'	0° 1' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.887	54.1	S.W.	1.1	5	0.69	9.4	H. Gordon, Esq.
St. John's Wood	51° 58'	0° 1' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	Dr. Lee, F.R.S., F.Z.S., M.B.M.S.
Harwell	51° 58'	0° 1' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	Dr. Lee, F.R.S., F.Z.S., M.B.M.S.
Card necton	52° 17'	0° 51' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	S.C. Whitbread, Esq., Pres., F.R.S., F.R.A.S.
Nottingham	52° 53'	1° 10' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	E. J. Lowe, Esq., F.R.S., M.B.M.S.
Hawarden	53° 37'	1° 10' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	W. Brooke, Esq., F.R.S., M.B.M.S.
Wakefield	53° 41'	1° 30' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	Dr. Moffatt, F.R.S., M.B.M.S.
Stonyhurst	53° 51'	2° 28' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	W. R. Milner, Esq., M.B.M.S.
Glasgow	55° 51'	4° 18' W.	56.3	51.4	56.3	54.4	4.9	56.3	47.1	45.8	44.3	0.4	0.901	53.8	S.W.	1.1	5	0.69	9.4	Rev. A. Wold, F.R.A.S., M.B.M.S.
																				Dr. E. D. Thompson, F.R.S.E., M.B.M.S.

The highest readings of the thermometer in air, were 58° at Wakefield; 56.5° at Greenwich; and 55.3° at Highfield House, near Nottingham: and the lowest readings were 28.5° at Glasgow; 30° at Uckfield; and 31.8° at Nottingham and Stonyhurst. The extreme range of temperature was therefore, 29.5° within the week.

The least daily ranges of temperature took place at Glasgow, Guernsey, and Norwich; their mean value was 4.3°; and the greatest occurred at Stonyhurst, Hawarden, and Greenwich, and their mean value was 9.2°.

The highest mean daily temperatures took place at Truro, Guernsey, and Exeter, and their mean was 49.7°. The lowest occurred at Glasgow, Hawarden, and Stonyhurst, and their mean value was 43.4°.

Rain fell on the least number of days at Cardington, and on the greatest number at Stonyhurst. The largest falls were 1.54 in. at Glasgow; 0.91 in. at Truro; and 0.89 in. at Stonyhurst: the least falls took place at Wakefield, 0.19 in.; Lewisham, 0.37 in.; and Greenwich, 0.38 in. The next Table shows the average results for different parallels of latitude.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Barometrical Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Read- ings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Thermometer.	Mean of all the Highest Readings of the Ther- mometer.	Mean of all the Lowest Readings of the Ther- mometer.	Mean Daily Range of Thermometer.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Hu- midity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.
																	General Direction.	Average Strength.	Average number of days it fell.	Average fall.	
Guernsey to Exeter	106 Feet.	29.580 In.	0.588 In.	54.5°	39.3°	15.2°	52.3°	46.5°	6.5°	49.7°	48.4°	47.0°	Gr.	0.3	0.917	53.9	S.W.	1.8	5	In.	8.3
Uckfield to Highfield	106 Feet.	29.580 In.	0.588 In.	54.5°	39.3°	15.2°	52.3°	46.5°	6.5°	49.7°	48.4°	47.0°	Gr.	0.3	0.917	53.9	S.W.	1.8	5	0.7	0.7
Cardington to Norwich	106 Feet.	29.580 In.	0.588 In.	54.5°	39.3°	15.2°	52.3°	46.5°	6.5°	49.7°	48.4°	47.0°	Gr.	0.3	0.917	53.9	S.W.	1.8	5	0.5	0.5
Lewisham to Stonyhurst	292 Feet.	29.545 In.	0.584 In.	56.4°	34.8°	20.5°	50.4°	43.2°	7.2°	47.1°	46.6°	43.8°	Gr.	0.4	0.896	53.9	S.W.	1.2	4	0.6	0.6
Glasgow	121 Feet.	29.545 In.	0.584 In.	46.6°	25.5°	15.1°	41.2°	37.9°	3.3°	40.4°	39.0°	37.1°	Gr.	0.3	0.892	54.3	S.W.	1.7	5	0.5	0.5

At GUERNSEY, the sky was mostly overcast, though at times clear, with sunshine. Rain fell on Dec. 29th and 30th, Jan. 3rd and 4th.

At TRURO, the early part of the week was overcast with drizzling rain; on Jan. 3rd the day was fine, but the night foggy. Rain fell on each day from Dec. 29th to Jan. 4th. The largest amount in one day was 0.33, and which fell on Jan. 2nd. The observer remarks that the weather was extremely mild for the season, and very damp.

At EXETER, on the night of Dec. 31st the wind was blowing strongly from the south. The wind continued to blow strongly throughout the day and night of Jan. 1st. Rain fell on Jan. 1st, 2nd, and 3rd. The fall on the first amounted to 0.33 in.

At UCKFIELD, the sky throughout the week was overcast, and the temperature on Dec. 30th and 31st was very mild; on the 30th, bats (*Vespertilio*) were flying about in the afternoon. The wind was high on the night of the 31st. Rain fell on Dec. 31st, Jan. 3rd, and 4th. The greatest fall during the week was 0.16 in., and occurred on Dec. 31st.

At 16, Marlborough Place, ST. JOHN'S WOOD, the sky was for the most part overcast. Rain fell on Dec. 30th, 31st, Jan. 1st, 3rd, and 4th. The greatest amount fell on Jan. 3rd, and measured 0.58.

At HARTWELL HOUSE, Aylesbury, the sky much overcast during the week. Rain fell on Dec. 30th, 31st, Jan. 1st, 2nd, 3rd, and 4th.

At CARDINGTON, near Bedford, a gale of wind occurred at midnight, December 31st (without any previous corresponding fall of the barometer), and continued till 6 P.M., January 2nd; the thermometer ranging unusually high. The sky, during the week, was uniformly overcast. Rain fell on January 3rd and 4th. The greatest amount, 0.30 in., fell on the 4th.

At HIGHFIELD HOUSE, near Nottingham, the sky was generally overcast during the week, and the temperature high for the season. On the nights of December 31st, and January 1st, the wind was boisterous, amounting on the night of the 1st to a gale, which attained its greatest height at 2 A.M., on the morning of the 2nd. Rain fell on December 30th, January 2nd, 3rd, 4th, and 5th: the greatest amount, 0.29 in., occurred on January 3rd.

At NORWICH, during the week, the sky was much clouded, and the wind principally from the S. and SW. Rain fell on December 31st, January 1st, 2nd, 3rd, and 4th: the greatest amount registered was 0.28 in. on January 3rd.

At WAKEFIELD, the sky was overcast during the week. Rain fell on December 29th, January 1st, 2nd, 3rd, and 4th. The greatest amount fell on January 4th, and was 0.59 in.

At STONYHURST, in East Lancashire, the sky was partially overcast during the week, and the prevailing direction of the wind W.S.W. Rain fell on every day, from December 29th inclusive to January 4th inclusive, the greatest amount was 0.36 in., and occurred on December 31st.

At HAWARDEN, the sky was chiefly overcast. Rain fell on December 31st, January 1st, 2nd, 3rd, and 4th; the largest fall was 0.20 in. on January 3rd.

At GLASGOW, frost occurred on January 3rd and 4th. Rain fell on December 29th, 30th, 31st, January 1st and 2nd. The largest fall was 0.70 in. on January 2nd; that on the 1st was large, amounting to 0.50 in.

At EXETER, some little fever, and that of a low type; otherwise Exeter is healthy, and has been so for some time.

At UCKFIELD, a few cases of whooping-cough and varicella, otherwise no particular epidemic prevalent.

At BEDFORD, a few cases of typhus fever, of rheumatism, and of influenza, in Bedford and the neighbourhood, during the week ending January 4th, 1851, have been reported by Dr. Barker.

At WAKEFIELD, there were 568 fresh cases of disease in the month of December, 1850, as follows:—

Abscess	9	Erysipelas	15	Pericarditis	—
Ague	2	Fever	33	Peritonitis	—
Aphthæ	3	Gastritis	4	Phlebitis	—
Apoplexy	—	Gonorrhœa	10	Phrenitis	—
Asthma	23	Gout	2	Phthisis	6
Boil	4	Hæmorrhage	6	Pleuritis	4
Bronchitis	26	Hæmorrhoids	2	Pneumonia	15
Cancer	2	Heart Disease	2	Purpura	—
Catarrh	95	Hooping Cough	13	Quinsey	8
Chicken Pox	—	Hydrocephalus	—	Rheumatism	19
Cholera	—	Hysteria	2	Roseola	—
Convulsions	3	Influenza	24	Scarlatina	1
Croup	2	Insanity	—	Scrofula	2
Delirium Tremens	3	Kidney Disease	2	Skin Diseases	9
Diabetes	—	Laryngitis	1	Scurvy	1
Diarrhœa	40	Liver Disease	5	Small Pox	1
Dropsy	—	Measles	—	Syphilis	10
Dysentery	3	Mumps	4	Teething	7
Dyspepsia	45	Nettle rash	—	Tetanus	—
Enteritis	4	Neuralgia	38	Uterine Disease	14
Epilepsy	4	Ophthalmia	7	Unclassed Cases	33

See the Registrar General's Quarterly Report for the Meteorological particulars of the month.

At HAWARDEN the season is remarkably mild, and disease may be said to be at a minimum. The thrush was heard on December the 22nd, 24th, and 31st; and the robin on January 4th. The lilac is budding. There are a few cases of measles and whooping-cough in the neighbourhood. I saw two cases of measles on Tuesday, the 31st, one of which was complicated with bronchitis, and one case of whooping-cough, on January 1st. During the week I have also seen two cases of genuine influenza—one commenced December 1st; the other, on January 1st. I have seen also three cases of catarrhal affections, which commenced on December 31st, Thursday, January 2nd, and Saturday, January 4th; one or two cases of tooth-ache, and one (on the 4th) of neuralgia of the occiput.

The weather all over the country, during the past week, has been of an unusual and unseasonable character, more particularly over the southern portions. The mean daily temperatures were of those values which usually obtain towards the end of April. The temperature of January 1st was more than 10 degrees higher than any first day of the year in the preceding 10 years; and within the same period there has only been one instance of the mean temperature of a day in January being of so high a value, viz., on January 28th, 1843, whose mean temperature was nearly of the same value. The mean temperature of every day in the week was much above its average. The sky everywhere was almost always clouded; the air was damp.

During the first three days of the week, the air was almost equally distributed over the country. On January 1st, it was unequally distributed. The reading of the barometer, reduced to the level of the sea, at Glasgow, was 29.29 inches; between latitude 53° and 54° it was 29.56; between 52° and 53° it was 29.75; and S. of 52° it was 29.89. It was also unequally distributed on the 2nd day, but to a less extent, and on the 3rd and 4th days it was almost equally distributed everywhere, the reading of the barometer at all places being of the same value when reduced to the same level.

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Printed by SYDNEY HEDLEY WATERLOW, of Gloster-terrace, Hoxton, in the county of Middlesex, at the printing-office of Messrs. WATERLOW and SONS, 66, London Wall, in the city of London, and published by THOMAS MARTIN, at the Office, East Temple Chambers, Whitefriars-street, in the precinct of Whitefriars, in the city of London.—Saturday, January 11th, 1851.

THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 3.

LONDON, SATURDAY, JANUARY 18, 1851.

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"Army Medical Department, January 16, 1847.

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"ANDREW SMITH, M.D.

"Deputy Inspector-General of Hospitals.

"Mr. T. B. BROWN, Druggist,

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TO BE SOLD BY PRIVATE CONTRACT, with Immediate Possession, a good Family Dwelling-house, with a Surgery, Stable, Coach-house and all other requisite Offices adjoining, situate in the village of Kenton Devon, six miles from Exeter, and one mile from the Starcross Station on the South Devon Line, the residence and place of business for nearly half a century of the owner, William Collins, Esq., who is about to leave the neighbourhood where he has most successfully carried on the Profession of a Surgeon and Apothecary. The property is held for the three healthy lives respectively aged 65, 33, and 29, and the life of the survivor subject to a conventional rent of 15s., and an heriot of 2s. 6d. on the death of each life. A medical man purchasing this property will most probably secure a large portion of the extensive business from which Mr. Collins now retires. For viewing, apply at the house, and for further particulars to

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THE CHISHOLM, Chairman.

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At the Annual General Meeting, held on the 9th Instant, an elaborate and highly satisfactory Report of the state of the Society's affairs was submitted to the Members, whereupon it was resolved, unanimously, that an allowance of Thirty per Cent. should be made on the Premiums payable on all Policies on the participating scale, on which five or more yearly payments had been previously made.

Credit is allowed for half the Annual Premium for the first five years.

The following Table exemplifies the effect of the present reduction:—

Age when Assured.	Amount Assured.	Annual Premium hitherto paid.	Reduction of 30 per Cent.	Annual Premium now payable.
	£.	£. s. d.	£. s. d.	£. s. d.
20	1000	20 17 6	6 5 3	14 12 3
30	1000	25 13 4	7 14 0	17 9 4
40	1000	33 18 4	10 3 6	23 14 10
50	1000	48 16 8	14 13 0	34 3 8

14, Waterloo-place,
10th May, 1850.

A. R. IRVINE, Managing Director.

HUNTERIAN SCHOOL OF MEDICINE, 1, Bedford-street, Bedford-square.—The Course of Lectures on the GERMAN MINERAL WATERS, commenced on Wednesday, October 30th, is continued every Wednesday, at a Quarter-past Two p. m., by Dr. SÜTRO, Physician to the German Hospital.

Gentlemen of the Profession are at liberty to attend on presenting their cards.

PERFECTION IN FILTERS AND CISTERNS.

PURE WATER is one of the most important matters that can possibly concern the heads of families, when it is known that the health is injured and the lives of all are endangered, not only by drinking Water containing gross impurities, but also from the common practice of using Lead Cisterns, it being a fact well known to practical Chemists and scientific men,—although perhaps not so generally known by the public,—that lead is acted upon by water, and the more pure the water the more readily it is affected by it.

In consideration of this fact, the *Wenham Lake Ice Company* have, for some time, directed their attention to the manufacture of Cisterns which are free from this great objection; also to the best means of rendering water perfectly pure by Filtration. They now offer, and wish more fully to introduce to the public, a perfect means of supplying pure water, by BIRD'S SYPHON WATER PURIFIER, a Filter invented by a practical Chemist, which has received the sanction of most of the leading scientific men of the day. Also, their PATENT GLASS ENAMELLED CISTERNS, which are, without exception, the best for the purpose of containing pure water ever invented; thus supplying everything desirable in connection with that most important article of domestic use—water; first, by rendering it free from all impurities, and then by furnishing a reservoir in which it may be kept for any length of time, without in the slightest degree becoming affected by metallic properties injurious to health.

These Cisterns are made of wrought iron, which is completely cased by a glass enamel fused by great heat, which will resist the strongest below; it never chips off, and there is no deleterious article in its composition, like the ordinary enamel, which is known to contain arsenic.

The Company are prepared to supply and fit up their Filters and Cisterns upon very short notice at the lowest possible remunerating profit, for cash; and are willing to adopt the novel plan of supplying filtered water by contract: thus guaranteeing to their patrons a full supply of pure filtered water at a trifling annual cost.

Office of the *Wenham Lake Ice Company*, 164 A, Strand, 1851.

The following are a few of the most recent Testimonials, selected from a vast number received by Mr. BIRD, since the first introduction of his Filter:—

"THE GENERAL BOARD OF HEALTH, Gwydyr House, Whitehall, June 27, 1850.
"SIR,—I have no hesitation in saying that I consider the Hydrostatic Syphon Water Purifier the best mechanical Filter I have as yet seen, because it may be used without trouble or alteration in any existing cistern.

"TO ALFRED BIRD, Esq."

"I am, Sir, yours truly,

"ROBERT RAWLINSON."

FROM THE HEAD MASTER OF THE BLUE COAT SCHOOL, BIRMINGHAM.

"Mr. BIRD's Patent Hydrostatic Syphon Water Purifier has been in use in this Institution for some time, and I have much pleasure in testifying to its thoroughly cleansing the water from all impurities; thereby improving the taste, and rendering it safer to drink, especially during the Summer months, when the Water abounds in impure matter. The supply from the Syphon is sufficient for our Establishment, where the consumption is necessarily large, there being nearly two hundred persons in the house.

"Blue Coat School, Birmingham, September, 17, 1850."

"GEORGE KIRKLAND, MASTER."

FROM THE PATENT JOURNAL.

"Our attention has lately been called to an invention of Mr. ALFRED BIRD, Experimental Chemist, of Birmingham, for filtering water, and which appears to be coming into very general use and appreciation. The apparatus consists of a small cylindrical metallic vessel with a tube and stop-cock, adapted for any length; in the interior are two inverted cones, and filtering media, through which the water ascends, when by drawing the air from the end of the tube, the instrument becomes a syphon. At the moment the vacuum is made by drawing the air from the tube, the filtered water flows freely, and may be drawn off without further trouble. Nothing can be more simple in its action, based as it is on the scientific principles of the laws of fluids. The water we have seen filtered by this machine, certainly appeared to be exceedingly pellucid, and to possess that freshness of flavour generally wanting in the ordinarily filtered element. On the whole, therefore, we feel pleasure in recommending this filter to public notice, more especially as it can be applied to any cistern or reservoir, and permits of an almost unlimited supply—both of which are advantages over the old filter, of no small importance. The price (if indeed price should be allowed to enter into consideration in such a question), is so moderate as to place this instrument within the reach of all."

Dr. LINDLEY, F.R.S., &c., says in the *Gardener's Chronicle*, of November 2, 1850, that "after having had several weeks' personal acquaintance with the action of BIRD's Hydrostatic Water Purifier, it appears to him to be admirably contrived for filtering water perfectly."

FROM THE BIRMINGHAM ADVERTISER.

"Among the most useful inventions of the age is one of Mr. ALFRED BIRD, an able practical chemist established here. Mr. BIRD has put it in the power of every one to drink pure water for the future. He has invented a Water Purifier, which, in the language of his advertisement, to which I would in a very special manner direct our London friends' attention, 'delivers per day an abundant stream of from 150 to 200 gallons of water, as pure, sparkling and brilliant as a diamond.' This is truly the invention of the age, and calculated to meet one of the universal desiderata for sanitary improvements.

BIRD'S HYDROSTATIC SYPHON WATER PURIFIER

DELIVERS (PER DAY) AN ABUNDANT STREAM OF FROM 100 TO 200 GALLONS OF WATER, EQUAL TO THAT WHICH FLOWS FROM THE FINEST MOUNTAIN SPRINGS,

Retaining all its crystalline freshness and beauty, and as brilliant and sparkling as the Diamond.

THIS FILTER is made externally of a pure white metal, more brilliant and durable than silver, and is but four inches in diameter and seven inches high. To set it in action it only requires to be dropped into the water, and the Pipe hung down outside. It purifies rain, river, tank, pond, or pump water, however dirty, the water retaining all the atmospheric air, on which the freshness of the taste depends.

It is especially adapted for the use of Private Families, Hotels, Inns, Club Houses, Hospitals, Public Institutions, Ships on long voyages, &c., &c., and in all cases where a never-failing supply of good water is desired. On ship-board the Purifier will be exceedingly valuable. If it be put into a bucket, the bucket being kept constantly full and suspended about six feet from the deck, the pipe exhausted and hung down, it will supply water of the greatest purity for a ship's company of three hundred men.

DIRECTIONS.—Carefully uncoil the Pipe, and bend it over the edge of the cistern. If the cistern be deep, the Purifier can be suspended by the bend of the pipe over the edge of the cistern, taking care that the Filter is always under water. If the cistern be shallow, the Filter should stand on two bricks at the bottom, to keep it out of the sediment which usually collects at the bottom of water cisterns. To set it going, apply the mouth to the tap, and withdraw the air. The instant the vacuum is formed, the water will rapidly ascend through the Filter, and springing over the bend of the pipe, will run an abundant stream.

For the first day, let the Tap remain constantly open, to wash out any dust which may happen to be left in the Filter, during the process of manufacture. Afterwards the Water may be drawn off as wanted.

For purifying Well or Pump Water, put the Filter into any vessel or cistern, which should be placed on a shelf or wall, four or five feet high, and kept full of Water; withdraw the air, by applying the mouth to the tap, as before directed, and it will begin to act.

If the stream should ever become small, take the Filter out of the cistern, and blow down the Pipe till all the water and impurity are forced out at the bottom. When air only goes through, replace the Instrument as before, and the stream will be found as copious as ever.

N.B.—Pipe can be had of any length, to suit the different heights of cisterns. The higher the cistern and the longer the pipe, the more copious will be the stream.

THE WENHAM LAKE ICE COMPANY, 164A, STRAND, LONDON.

(Purveyors to Her Majesty, the Queen.)

Are the Sole Manufacturers of the PATENT GLASS ENAMELLED CISTERNS, and their Office is the Depôt for supplying BIRD'S FILTER, wholesale, retail, and for exportation.

PRICE of the FILTER, Twenty-five shillings.

The GLASS ENAMELLED CISTERN, from Fifteen shillings.



LECTURES.

LECTURES ON THE GERMAN MINERAL WATERS,

DELIVERED AT

THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

Physician to the German Hospital.

LECTURE VI.

PFAFFERS.

GENTLEMEN,—Having left Wildbad at half-past 9 A.M., the diligence arrives at Stuttgart in eight hours. The road, as far as Calw, is extremely picturesque. It rises constantly, lined on both sides with charming forests. The carriage passes for some time near a ravine, separated from the high road by stones, down which the timid can scarcely look without a shudder. From Calw to Stuttgart the aspect becomes more ordinary. From Stuttgart we proceed by railroad to Canstadt (about four English miles distant), situated on the right shore of the Neckar,* which here becomes navigable. The town contains upwards of 4000 inhabitants, and is connected with Stuttgart by a handsome park, through which a carriage road passes. On the "Wiesenplan," at the south-eastern part of the town, a rural feast is celebrated every year on the 28th September, which is visited by an immense concourse of the surrounding country people. The environs abound in petrifications. The elevation of Canstadt over the level of the sea is 600 feet. The climate is mild, the environs fertile and well-cultivated, abounding in wine and fruit, and are called by some, "the garden of Suabia." The mineral springs originate out of a ferruginous lime-tufa, superposed by strata of clay and argilla. They belong to the class of saline chalybeates.

The temperature is 15° to 16° Reaumur, summer and winter. The water is clear, sparkling, and has a saltish piquant taste. That of the *Sulzerquelle* tastes more agreeably than the others and shows "Sprudel" properties, its supply increasing and diminishing periodically. It contains about 89 grains of solid constituents in 16 ounces, viz., 17½ of chloride of sodium, ½ a grain of chloride of magnesium, 10 grains of sulphate of lime, 2 of sulphate of soda, 1-5th of sulphate of magnesia, ½ of sulphate of potash, nearly 6 of carbonate of lime, 1 of carbonate of magnesia, less than 1-10th of carbonate of iron, carbonic acid gas 21 cubic inches. Temperature 15½° Reaumur. The other springs are very similarly constituted. The "Wiesenquelle" contains ¼ of a grain of iron. Besides the above I would merely mention "*Die obere Sulz*," a small pond, extending to about a quarter of an acre, and formed by several confluent springs. The surface is constantly covered by gas-bubbles arising out of the depth, and consisting of carbonic acid and nitrogen gas. Temperature 16° Reaumur. The water deposits a great deal of mud and seems to be in constant motion. Its amount of carbonate of iron is ½ of a grain. There is an ascending douche very advantageously employed in catarrhal affections of the vagina and rectum, and a whey establishment at the spa. The water is considered as tonic and solvent. The reputed *orthopaedic* institution of Dr. Heine is well worthy a visit. It is built near the "Frosnerische Bad." In the "obere Sulz," near the gardens of the establishment, the *orthopaedic* patients are enabled by certain contrivances to bathe in the pond at a temperature of 16° to 17° Reaumur; artificial waves are produced by wheels to increase the stimulating and tonic effect of the baths. Mud, douche, rain, and shower baths are likewise administered. I would further allude to Dr. Veiels' establishment for herpetic diseases, which also annually increases in reputation, and in which artificial baths, river baths, with strong afflux, are used with considerable advantage. But, Gentlemen, I have given these details merely on account of the importance to be attached to Canstadt, from its neighbourhood to the mighty potentate we have just left. If you proceed from Stuttgart by railroad at eight in the morning, without stopping, south-east as far as Ulm on the Danube, and then pursue a due southern ride, slightly bending

westward, you reach Friedrichshafen on the Boden-see (Lake of Constance) in 7½ hours, that is at half-past 3 P.M. The steamboat waiting for the train starts half an hour afterwards, as soon as it has received the passengers and cargo destined to cross the "Boden-see." I find in my journal the following remarks:—

"The view on the lake is most delightful and particularly striking. Whilst hitherto the various modifications of forests, hills, and mountains exhibited their beautiful trees and luxuriant foliage, here nature displays charms, as it were, of an opposite kind. The lake presents a green surface, gently moved by slight undulations. On the sides, masses of snow are perceived with the naked eye, covering the peaks of the glaciers in the midst of summer. There is something in this peculiarly awful, denoting the inscrutable greatness that must have pervaded the creative Spirit, which presided at the formation of the earth. The gentle movements of the vessel cause a rather agreeable sensation, and do not prevent writing on the open deck in this charming weather. But in storms the boats are said to be tossed about, as if shaken by real sea-waves. The Wurtemberg railroad appears extremely well managed, and really fulfils the purpose of not only forwarding the hurrying passengers with considerable speed, but actually encouraging traffic by the pleasure it communicates. Every seat affords as much comfort as can possibly be accumulated without identification with the next. The greatest punctuality is observed in starting and arriving. The carriages of the second and third classes are so contrived as to give them more the appearance of a company assembled on rows of benches in a drawing-room, with an open passage in the centre for the officers and travellers. If, while sitting at one end you see an acquaintance at the other, nothing prevents your walking up and sitting by him, whilst the carriage is in motion. At every station the name and exact time of stopping is called out. As soon as the train begins to move again, an officer walks through the passage and asks for the tickets of those who have to leave at the next station. Not only is a saving of time thus effected, but the possibility of travellers passing their places of destination is obviated. The great civility of every officer, not only to those of the first class, but to the humblest passenger, is too well known to be dwelt upon. This plan of railroad management is general in Germany, not only to the great benefit of the public, but of the railroad treasury."

I beg forgiveness for this digression; but it is such an important subject for spa visitors, and all those who seek pleasure or instruction in Germany, that I could not resist expatiating on its conveniences, with the lurking hope, that the simple contrivances of the continent might perhaps find introduction here.

The steamboat lands on the opposite shore at *Rorschach* in about an hour and a half. The diligence starts half an hour after your arrival, that is at six P.M., and takes you within eight hours through mountainous roads, with an occasional peep at the infant Rhine, past Rheineck, Altstätten and Sargans to Ragaz, which lies at the foot of Pfäfers. You arrive at two o'clock in the morning at the post-office, hotel, and bath house, which are all united in one building. The place is comparatively new; the baths are supplied from the chief source of Pfäfers, resembling the latter in every respect but temperature, which is here 27° to 29° Reaumur. The view on both sides of the house is very pleasant, though not to be compared with that of Pfäfers itself, to reach which, you ascend a winding rugged path along the *Tamina*,* which rushes by in the depth with a continuous hissing noise, and with the greatest vehemence. On both sides rocky mountains rise almost perpendicularly to a height of 600 feet. The view is most romantic, but becomes truly awful and sublime, when, arrived at Pfäfers, you are led by curiosity to pursue the *Tamina* along the narrow, wooden path erected between the rocks and leading to the three sources from which all the baths are supplied. To quote from my journal:—"The rocks here are not only perpendicular, but actually bend towards each other, scarcely admitting the rays of the sun, and forming cracks, fissures, and promontories, which truly fill the wanderer with awe. Treading cautiously along and admiring this wonderful greatness of God's creation, which displays its grandeur in such variety of productions, raising such an insignificant little rivulet into a powerful roaring mass, which rushes along in the ravine under our feet, filling with humbleness and timidity the boldest heart; we entered the chief source after stepping along cautiously for about ten minutes, and found it filled with vapour. By means of a light, after a few minutes, we could perceive objects in the disappearing darkness, and we gazed down the cleft, whence the steaming fluid streamed out. Bathed in violent perspiration we

* You see the Neckar taking its origin north of the curvature formed by the Danube at Donaueschingen, proceeding first to the north, then to the north-east, passing by the university-town of Tübingen, till you see Vils entering, then it winds to the west, and flows northward, by Canstadt, leaving Stuttgart a few miles to its left, and then Ludwigsburg. It receives from the east the river *Murr*, and afterwards from the west the river *Enz*; pursuing its northward course, it is joined, after having passed Heilbronn, by the *Kocher*, and afterwards, by the *Jaxt*. It journeys then more north-west, and at last turns to the south-west to pass the charming and celebrated town of Heidelberg, replete with sweet recollections to those who have spent therein their happy youth of academical life: thence it starts straight for father *Rhine*, whom it joins at *Manheim*. If you cast a glance upwards, you find another highly-important tributary, the *Main*, embouching into the Rhine, at *Mentz*.

* Arises in the south and enters the Rhine towards the north, after a short but rapid course.

issued forth, ascending with care and a considerable degree of danger eight or ten irregular steps, to examine the second and third sources, though these two are not used for the baths, and run down the precipice into the Tamina."

Pfäfers, lat. 47, long. 10 (Favières, Fabarie aquæ), is situated in the canton of St. Gallen, in Switzerland. You see the lake of Wallenstedt to the north-west, and the town of Chur (Choire) to the south-east. The anterior arm of the Rhine-brook, proceeding from the south-west, is joined at Reichenau by the posterior branch, which started from the more eastern St. Bernard, and passes upwards, east of Pfäfers, towards the Lake of Constance. The principal road leads from Ragaz, up to a considerable acclivity, and then again to a steep descent into the valley, through the village of Valens. This road is about five miles in length, and is generally chosen for descending, whilst the path described above is more than two miles shorter, and usually serves to bring the visitors to the remarkable bathing place. The necessities of life are partly dragged to it by the former road, and partly drawn into the bath by cranes from the high rocky wall of the convent, to which the place formerly belonged.

The walks must naturally be limited. They are terraces which appear spirally superposed over each other, leading to greater and greater heights as you ascend the successive eminences. At a short distance, however, walks of a very charming character may be found by ascending the former convent and wandering through its environs. The Galanda, the Valens mountains, with the so-called Grauhörner (grey horns), rise to upwards of 7,000 feet, and offer the most variegated tints and contrasts of forests and rocks, of mountain-meadows and snow-fields, of woods and plains, furnishing an *ensemble* of the sublime and picturesque.

The clefts from which the sources originate are composed of black limestone, interspersed with veins of white fluor-spar. Formerly the bath-house stood in the grotto of the chief source. It was erected on beams that were driven into the rocks overhanging the yawning abyss. The patients were let down with cords from the heights of the surrounding cliffs, for a week's course.

Now human industry has provided a more convenient approach to this remarkable spa, hidden at a height of more than 2,000 feet over the level of the sea, at the foot of the Galanda, which reaches an eminence of upwards of 8,000 feet, in the south-eastern boundary of the canton of St. Gallen.

The river Tamina separates Hof-Ragaz from the village of Ragaz, where two highroads meet and induce a lively intercourse of persons engaged in commerce or in pleasure-seeking.

You see the route from the Zurich and Wallenstedt lake, as well as that from the Lake of Constance, leading through Ragaz and Chur to Italy.

If you take a survey of the valley at Hof-Ragaz, you perceive on your right the little town of Meinfeld, the Luciensteig (eminence), with the towering Falknis, on the left the woody declivities extending to the small town of Sargans (north of the spa), over which the Gonzen, the Allvier, and the Kuhfirsten rise, while the youthful Rhine winds through the extensive plain.

The mountain scenery disclosed on ascending the valley of Pfäfers, is very grand and greatly to be admired.

Having wandered upwards for about an hour, and reached the convent and village of Pfäfers, you see the mountain valley lead southward to the Kunkels pass and the Kalfeus valley. To the west rise the Valens Alps, with their ragged points; to the south-east, the proud Galanda. Near the village of Vätts, the Tamina valley assumes a more westerly direction towards the declivity of the high Ringel, and extends to the *Scheibe*, which forms on its apex, at a height of 10,000 feet, a union of the cantons Glarus, in the west, St. Gallen, in the north, and Graubünden, in the south. From the *Scheibe* the Sardonien glaciers are lowered into the Kalfeus valley; and from these the Tamina rushes down and flows for about twenty-five miles, fed on both sides by frequent water-falls. In one of its most awful depths, the thermal healing source comes to light, and is conducted to a somewhat more open and lighter spot on the other side of the river to the bath buildings, erected on the rocks, and confined by the foaming Tamina on one side, and by the steep overhanging declivity on the other. The new and more convenient road takes you from Hof-Ragaz in about an hour and three-quarters.

The walk to the source is now less dangerous than formerly, having been provided with balustrades, and somewhat enlarged. You start from the drinking saloon, and pass over the Tamina bridge, through a rocky vault, till you reach a little closed gate.

If you take a survey here, you perceive on the right the overhanging rocks; on the left, dark mountain masses covered with the light foliage of maple and beech trees; at your feet, the hissing Tamina; and in the fore ground, the bath establishment. In the

back ground is the perspective of the widened gap, sparsely illuminated by peeping rays of the sun. On boards, supported by beams, which are wedged into the rocks in a surprising manner, you walk a distance of 1,500 feet. The side rocks are 200 feet high, and at the part where they approach each other they reach 290 feet. The light gradually assumes grayer tints; the moisture and coolness perceived, as you advance, further increase the horror of the scene. Under that part where the rocks almost unite, a remarkable marble grotto is pointed out, 35 feet broad and 34 feet high. It lies on the left of the Tamina, and was built some hundred years ago for devotional purposes. After this the rocks open again, and you soon approach the vapour-cave, where the chief source issues out of clefts in a grotto hewn from the rocks.

Fissures of the Kalfeus mountains, over the crest of which the Tamina rushes, are probably filled by water from the mountain heights of Galanda. Being closed in winter, they receive no more influx and therefore cease to supply the source. The water contained in the subterranean canals then sinks deeper and the veins of the upper sources begin to vanish, the lowest sources flowing the longest.

The baths are not here covered with sand, but with marble in separate basins, the water constantly running in and out. Cooling is performed by opening door and windows and turning the cock off, from which the water runs. The natural temperature of 29° is lowered according to circumstances to 28°, 27° or 26° Reaumur. Here persons, particularly of the environs, sometimes remain for hours in the baths even of the higher temperature, with very marked results.

The water of Ragaz has lost one degree of Reaumur by its journey from Pfäfers; all the other arrangements are analogous with the parent spa. The *douche ascendante* is employed with great advantage to assist the course. Though the diminished heat cannot count as a difference, for as I mention above, the baths are generally taken at an equally low temperature in both places, I must not conceal from you the fact, that Pfäfers with all its inconveniences and limitations stands in higher reputation with the profession and the public than the pleasant and commodious Ragaz, which lies about 600 feet lower but offers the same water to the valetudinarian.

It is positively thought less efficacious, and this opinion cannot originate in medical rivalry, for Dr. Kaiser, senior, resides at Ragaz, whilst his son, Dr. Kaiser, jun., gives his professional services at Pfäfers, and consults with his father in all cases of difficulty or danger. The argument that the rumour might proceed from fancy does not hold good here, for people would not come hundreds and hundreds of miles, to imprison themselves for three or four weeks in a confined locality, which never enjoys the congenial influence of the sun more than seven hours a day, if powerful and decisive facts did not furnish a positive inducement. What then is the hidden influence presiding at the immersion in the parent baths and failing in the filial branch? Is it the greater height of the former? Ragaz lies about 400 feet higher than Wildbad, and still it is thought of inferior efficacy, while Pfäfers is maintained by many to surpass the spa of the Black Forest in power. Let us well consider the facts before us, and endeavour to extract a theory from them. It is a remarkable coincidence in the three chief akritic spas, viz.—Wildbad, Pfäfers, and Gastein, that the locality of each is confined, and the air consequently impeded in its circulation. But there is another coincidence, viz., in each of the three a violent and foaming mountain torrent rushes through the spa with great fury. A third coincidence consists between the two latter, of having a new establishment at a more convenient lower locality, receiving the same source at a diminished temperature. And there is this fourth similarity, that the parent establishments are positively pronounced of considerably greater efficacy.

You will often hear in the common walks of life, even in this stupendous London, that individuals who have enjoyed for years excellent health, in the circumscribed space of the city for instance, found their healths impaired after they had exchanged their "unhealthy" quarter for a more salubrious residence. Such complaints I am occasionally destined to hear myself, after my advice of preferring the open suburbs as habitations, has been followed. How is this? Can we not reckon on increased vitality and lengthened life, if we flee from all the injurious exhalations and other dangerous influences, produced by congregated crowds of human beings? Do we not feel more cheerful, more vigorous, more conscious of our individuality, as soon as we begin to breathe the purer air of the charming fields, that a kind Providence spreads out for our use? Physiology promises greater vitality, our sensations confirm the promise, and still how can we reconcile these contradictory facts? Gentlemen, though as a general rule, we

might continue to advise healthy persons to choose a freer habitation, circumstances must occur, in which the latter are actually more injurious. Does nature wish us to inhale as much oxygen as possible? If so, she would not present to our respiratory organs one part of this respirable gas with four parts of the involving irrespirable nitrogen. What do we see in animals that inhale pure oxygen? They live more intensely, all their functions are heightened, but as an unavoidable consequence, the organs cease sooner to exhibit the blessing of life. In the same way with many a person, country residence may cause greater vitality, and more intense organic action; but the question is, does not the stronger exertion lead to a quicker exhaustion? I would not receive as an objection, the longevity of farmers, who have spent their whole lives in this bracing and pure atmosphere. But we all know, how injurious strong contrasts are to health. And the most zealous advocate of temperance, will not advise an habitual indulger in spirits to deprive himself suddenly of the usual beverage. If then, a person has for a long series of years performed the respiratory function under the emollient action of confined space, he will not, without danger, suddenly imbibe the pure, but more exciting gaseous mixture. Many a dormant morbid diathesis may, and does develop itself into disease, and there is no doubt, that many a life would have been prolonged, by remaining in a less open situation. A case just occurs to my mind of a gentleman, who has the misfortune of an organic impediment to respiration, by a bent spine. For some years he resided at Clapham, and always suffered with a more or less violent catarrhal affection of the lungs. I advised him to remove to the city, near his place of business. For about ten months past, he has lived in an airy and commodious house in the same street in which he has to transact business during the day, and he feels himself positively healthier, and his thoracic organs stronger. Some influence is, no doubt, also to be ascribed to his more regular mode of living now. Of course, stagnant waters, or other injurious evaporations are hurtful to the immediate neighbourhood. From the above, I wish to conclude, that the very limitation of the locality may act healingly in some measure. What patients have we before us? Mostly those in whom nervous power is diminished, perhaps of certain parts only. Vicious metamorphic action has taken place. Substances, which should remain dissolved in the circulating liquid, have been separated and deposited in the joints, whilst others, that ought to have been secreted, were retained. Before desiring a stronger vital action to proceed from the circulating organs, when oxidation and abnormal separation might increase, we may wish for a somewhat limited respiratory and oxydising action, so as to leave freer scope to the penetrating warm liquid from without, for inducing mobility of the stagnant particles, or for rousing the torpid and weakened peripheric nerves. When this is accomplished, bracing atmospheric influence will be useful in carrying to a successful issue the commenced curative process. The inconvenience that might possibly result from the greater pressure or confinement of the air, may be thought to find a certain corrective in the violent fall of the respective rivers, which, through the vigour of their movements, attract atmospheric impurities with more energy, and impart more freshness to the circumambient air, than they would without this rapidity.

The chief indication for Pfäfers, is *real nervous paralysis*, through wounds or apoplexy; or *paralytic gout*, not based on articular swelling; the power of the peripheric nervous system is distinctly raised by the spa, and more so than at Wildbad, though at the latter absorption and resolution of swellings, is better performed.

The temperature of the chief spring is 30° Reaumur=100 Fahrenheit; the deepest source has 30½° Reaumur at its issue, the water is clear, tasteless, and inodorous. Sp. grav., 10,003; a small quantity of bath-glue is found of a yellowish colour, and unctuous to the touch.

Analysis shows 2½ gr. of solid ingredients in 16 ounces, viz.:—

Carbonate of Magnesia	....0.87..	about 4-5ths.
" Lime	.....0.32..	" 2-5ths.
Sulphate of Soda	.....0.62..	" 3-5ths.
" Lime	.....0.37..	" 1-3rd.
Chloride of Sodium	.....0.21..	" 1-5th.
" Magnesium	....0.16..	" 1-5th.

Total....2.55, with a very minute quantity of iron.

Gaseous Contents:—Oxygen 1.3 cubic inch.

 Nitrogen 3.7 " "

 Carbonic Acid. 4.15 " "

The bath glue is composed of silex, carbonate of lime, of magnesia, of argilla, and of oxide of iron. Internally and externally, the water has a stimulating, solvent, and, at the same time, strengthening and antispasmodic effect on the peripheric nervous, and

on the vascular system, counteracting venosity of the portal system, and therefore removing obstructions. In spasms, paralysis, and neuralgia, a marked sedative power is exhibited.

Paracelsus, who visited the spa 300 years ago (1538), expresses himself thus on its caloric:—"You are aware that heat may have a various entity in itself. The heat of the sun is one, that of dung is another; a different heat, again, is that of burning wood, but much is wrought here by the innate warmth, that may be pleasantly compared with human nature. What great things are performed by congenial heat is shown by the hens brooding their young ones through it, also as silk-worms are bred by such warmth. Thus knowing, that such an incorporated heat exists here, Pfäfers would surpass analogous simplicia, in which the warmth does not exist."

Hufeland says of Pfäfers:—"Of all thermal springs, Pfäfers, in Switzerland, contains the smallest quantity of perceptible ingredients. The water tastes and smells like common water, and, nevertheless, it exhibits an efficacy which surpasses the most powerful spas. In this very year a striking instance has occurred to me. A man, who has long been affected with hypochondriasis, and retarded alvine evacuations, and who had used alternately without effect, even requiring other remedies to strengthen the efficacy, went last year (1825) to Pfäfers; and scarcely had he used the waters two days, when every morning alvine evacuation regularly ensued after drinking a few glasses. His bodily and mental condition visibly improved, and he felt a freedom and mobility in his whole being unknown to him for many years; and, notwithstanding his sojourn in a deep mountain fissure, which only admits light for a few hours a day, constant alacrity and cheerfulness filled his soul."

The spa showed itself efficacious in dyspepsia, flatulence, acidity and mucosity of the stomach, especially in *gastric cramps*, through repression of piles, exanthemata, or of gout, in habitual diarrhoea, or obstruction, in abdominal plethora, &c.

Next, in diseases of the nervous system: hypochondriasis and hysteria, if based on suppressed action of the ganglionic system, which resulted in antagonistic affection of the cerebral system; if the organs below the diaphragm are impeded in their oxydation and decarbonization by arterial blood, to the disturbance of the vegetative nervous sphere, the diluted warm liquid penetrates to them, and induces a more vigorous transformation, and subsequently, a restoration of the previous equilibrium.

Metastatic gout, particularly in nervous, irritable subjects, and neuralgic pains of the face, are relieved here; also abnormal catamenial flow becomes regulated, &c. &c.

But, as I stated above, the chief reputation of the spa is in *paralysis*, contractions, and local weakness from wounds; but there must be no residue of apoplexia or congestion to the brain, else the spa would be injurious. The paralyzed part must not be too emaciated, nor quite insensible, else the so-called "Ausbade kur" might be required, which consists in persons remaining longer and longer in the baths every day, till several hours' stay, for a consecutive series of days, has produced violent reaction.

Dr. Kaiser, Jun., showed me a very interesting case of a young man, 21 years of age, who was precipitated, about twelve years ago, from a hay waggon, on his head, and the load itself pushed upon him. He became unconscious. A concussion of the cervical vertebra appeared to have taken place, still he could perform light work for a year with no other morbid phenomena than a stiff neck. After the lapse of this period his right hand began to become paralysed, and some time afterwards the right leg. The left arm and left leg followed in succession, so that, for several years, he was neither able to sit or stand; urine also was discharged involuntarily, and stool could be promoted only by the strongest purgatives. Artificial sulphur baths and strychnine had been employed without advantage. In this state, he arrived on August 3, 1840, in the establishment for indigent patients at Pfäfers. He had to be carried into the bath, and held there by an assistant. Nevertheless, he received two baths daily, at least, so that he used fifty within a month. At the same time, he drank thermal water, *ad libitum*. Amelioration was inconsiderable, only the fingers could be moved a little more easily; the digestion showed slight amelioration, the general nutrition being strengthened by wine and substantial diet. Soon after the course a bath eruption showed itself, when he had arrived at his home, and, from this critical phenomenon, marked retrogression of his evil began to show itself. In January, 1841, he could move hands and feet, and felt more sensibility in his whole body. In May, he could walk about in the room with two assistants. From June 5th, he repeated a four weeks' course, with frequent douches on the cervical and dorsal vertebrae. On the 18th day of the course he could move himself alone with a stick before the "Curhaus." He left the establishment, with the direction to

return after a month's repose, and repeat the course. This was done from the 13th of August. In the summer of 1842, he availed himself of Pfäfers, and continued to do so in successive years, getting gradually, but steadily, better. To-day he can walk perfectly well, without the assistance even of a stick. I examined the patient myself, and the manner in which he described his gradual progress, how he could use one limb and how another, and how he began to sit without assistance, leaves no doubt that his cure from traumatic paralysis, in consequence of pressure or lesion of the spine, is solely due to Pfäfers. (This I wrote in August last year.)

The so-called youth-restoring property is attributed to the source, in a high degree. Individuals of eighty years of age, suffering from *marasmus*, are said to have been relieved from their great weakness, and considerably strengthened and refreshed by the course. Pfäfers is injurious in real phlethora, in congestion to the head or brain, in active hæmorrhage, in phthisis, in diseases of decomposition, as dropsy, in internal suppuration, in general emaciation, &c.

The constituents being less even than in Wildbad, only $2\frac{1}{2}$ grains in 16 ounces, of course no influence is attributed to their action, nor would I recommend them, *a priori*, for the treatment of disease, on account of the small quantity of these not powerful remedies. But, Gentlemen, whilst the knowledge of our materia medica would not justify me in choosing these few grains of magnesia, lime, and soda, with carbonic, sulphuric, and hydrochloric acids, for certain diseases presented to me, I feel it, on the other hand, my duty to seek a rational explanation of facts recorded and acknowledged for several hundred years.

If these pure thermal springs would *merely* act through their inherent caloric, then, why should there be such a great difference in the species of diseases cured at each? Look at the facts to which I directed your attention. Whilst in most diseases claiming cure at Wildbad, absorption of effete and stagnant deposits performs the chief part, corresponding with the previously mentioned solvent power of chloride of sodium, and assisted by the imbibition of nitrogen, counteracting the prevalent inorganic earthy formation, you see here the chief ingredient to be carbonate of magnesia and of lime, with sulphate of soda. Taken internally, in great quantities, and brought into a very lengthened contact with the cutaneous pores, externally, the magnesia might not be imbibed in a sufficient amount to exert its antacid properties, but it may exert a greatly sedative influence on the nervous system in conjunction with the gently stimulating warm fluid, which rouses the peripheral nervous ends into renewed function.

The lime may partly support this anti-spasmodic action and partly enter into combination with the weakened osseous system, allowing a greater degree of exertion and imparting more stability to the articular movements.

The sulphate of soda may assist in gently promoting the intestinal function, and act as a sort of derivative from the affected nervous system. Join with this the influence of the peculiar atmospheric character, incidental to the locality, and we may conceive how this *ensemble* has produced the changes brought to our notice. This view is confirmed by the great utility of the water in the form of clysters in obstinate alvine obstruction, abdominal infarcta, suppressed hæmorrhoids, &c.; also from its great utility, if merely taken internally, in very irritable digestive organs.

An hour is the general length of a bath, and the course usually comprises twenty-one. Persons bathe here separately, in single baignoires, or in larger ones in common with several other persons. After the bath, the invalid generally lies down for a quarter of an hour. The water is conducted by pipes into the bath vault, and constantly flows into each baignoire. As soon as a certain height is reached it flows out again. The temperature of the baths in Pfäfers, uncooled, about 29° Reaumur, $= 97\frac{1}{2}^{\circ}$ Fahrenheit; in Ragaz, 27° to 28° Reaumur, $= 92\frac{3}{4}^{\circ}$ to 95° Fahrenheit.

Every evening the water is let off, and the baignoires are cleaned. Some vapour is perceived in the bath-rooms when cold air enters at the opening of the doors, but this is not so perceptible to the bather himself. Where a greater quantity of water flows into the basin, the vapour appears more concentrated, and is employed as a natural vapour-bath with very favourable results.

The tubes out of which the water is discharged serve as weak douches on different parts of the body. But there are besides douches in separate rooms, fitted at a height of twelve feet, and falling down as rain, stream, or drop douches.

What is called ausbaden (out-bathing), formerly much in vogue here, consists in enforcing bath eruption by very prolonged bathing, and is connected with such dangerous results, as to be now nearly abandoned. The bathing had been gradually extended to eight or nine hours per day, so that the patient had merely to alternate between his bed and the bath. Between the

fifth and ninth day, fever frost appeared as the precursor of the bath eruption, which soon followed (between the twelfth and fourteenth day). Bathing was still continued, and prolonged till disappearance of the eruption commenced, then the time of bathing was gradually diminished to the end of the course. Four weeks was the usual duration of this course. The eruption mostly exhibited the miliary character; sometimes mere swelling of hands and feet took place. The paralysed parts were often first affected by the eruption.

Whilst using the bath the diet should be appropriate to the remedial influence, and the clothing warm. As after-cure, no chalybeate spring nor other tonic treatment ought to be employed, for in the spa the cure is often merely instituted, fresh action may be only awakened, and the salutary crisis may not appear before weeks or months have passed. Beware then of disturbing the resumed efforts of nature, unless urged by important morbid phenomena.

Often, however, the so-called "Trauben-cur" (grape cure), is allowed to follow the course with great benefit. Their cooling and solvent properties diminish the irritability of the vascular system, promote retarded secretions of the vegetative sphere, increase bilification and portal circulation, and thus counteract hæmorrhoidal tendency, or otherwise congestive influences.

I have here again prepared a rough imitation of the thermal water, and the tests I employ show that, like Wildbad, it deserves, as regards its constituents, the former name of "chemically indifferent."

I ought not to omit mentioning that here, as in nearly all German spas, provisions are made to give the foreign and inland poor gratuitous accommodation and treatment, with some necessary regulations and restrictions. In many spas, there are even funds to pay the travelling expenses of indigent invalids.

Before concluding, I shall quote a few lines from my journal referring to another subject, not devoid of interest for the medical student:—

"Returning from Pfäfers down to Ragaz about half way, a small bridge leads over the Tamina, and then a narrow zigzag footpath winds up to the top of the almost perpendicular mountain on the right of the Tamina. Several times I was obliged to stop for want of breath. Looking down the tremendous precipice caused a slight sensation of giddiness, and made me pursue more vigorously the steep and rugged path. When at last arrived at the summit, a wide prospect opened before my eyes. The only footpath appearing to the wanderer leads to an ancient convent, transformed into a county asylum for lunatics, under the able direction of Dr. Ellinger, whose acquaintance I made about ten years ago, when I accompanied poor Mr. U. from Augsburg to Winnenthal, under Hofrath Zeller, where Dr. E. was then the resident medical officer. His method of treating the patients, though I only observed it for a short period, filled me with admiration. It seemed to consist in two principles, viz., causing the patients to work and occupy their time by various contrivances, and *speaking with them as if they were perfectly sane*. This latter point is extremely difficult to perform, though apparently easy. For instance, if a patient wishes or utters anything obscure, he neither contradicts it, nor tacitly agrees to it, nor does what is occasionally done by well-disposed physicians, viz., speaks with them as one does with spoiled children. No; he enters into conversation with them, and treats the subjects broached as if uttered by sane persons. I saw one instance of a woman, whose cell we entered, and who began to talk herself into fury through non-fulfilment of some wishes. The Doctor did not seek for fictitious excuses, but entered on the subject in the manner mentioned, and I was quite surprised at the *decidedly sedative* and striking influence this manner exercised. She was calmed in a few minutes, which tended to confirm the favourable impression at first produced in my mind by this careful psychological management of the soul. Of about 150 patients he had under his care for three years, forty were cured, many without any medicine. All his patients seemed deeply attached to him, and readily obeyed him, without murmur or hesitation. Restraint is very rarely resorted to, and only after the failure of all other means. All the arrangements of the establishment I found most convenient, and the prospects open to the eye on all sides delightful, with a great variety of walks in different directions. Dr. E. seeks one reason why Dr. Conolly can entirely dispense with restraint, in the supposition that few patients, in his opinion, come fresh in their first violence to Hanwell, but mostly cases of old standing. The height of the establishment is 2,700 feet, that of Pfäfers, 2,100 feet, and of Ragaz, 1,600 feet over the level of the sea."

(To be continued.)

CORRESPONDENCE.

EXCISION OF THE HEAD OF THE FEMUR.

To the Editor of 'The Institute.'

SIR,—The principal object I had in view in bringing before the Medical Society of London my observations on excision of the head of the femur, illustrated by twelve cases,—all that I could collect,—has been already attained. The memoir I read on the evening of the 13th ult. was attended with this result: it brought within the Society's hall a large assemblage of my professional brethren, including many surgeons of known experience, and it elicited from them remarks which must be deemed valuable, whether in accordance with or adverse to the views I have adopted in respect of an operation which seems more formidable than it really is; for excision of the head of the femur, and of the neck and trochanters of that bone, when affected with caries, is not in itself a difficult operation; the difficulty lies in the diagnosis. The caution, amounting almost to timidity, with which many surgeons regard operations on the hip-joint, has arisen no doubt, or at least been much influenced, by the well-known fatality of amputations at or near the hip-joint, and by the hopeless character of gun-shot fractures involving the upper third of the bone.

It is to the observations there made on the subject of my memoir, that I mean, with your permission, briefly to reply.

1st. The gentlemen who favoured the Society with their valuable remarks, seem to have lost sight of the fact, that the most obstinate cases of caries in this region, when occurring in the adult, are not unfrequently confined to the upper and outer surface of the trochanter major. I have it on what I may consider the best authority, that such cases, clearly within the reach of the surgeon, and imperatively demanding the aid of surgical means, are mistaken for morbus coxarius, for diseases of the hip-joint, and are treated as such—unavailing of course—and terminate (unless interfered with) uniformly in death. For we know nothing of the real nature of this kind of caries; it is as yet incurable by any means short of the actual cautery or the knife. This class of cases, intractable no doubt, but still remediable by surgery, seems to me to have been altogether lost sight of. The admirable practical observations contained in the lucid speech which I may say terminated the debate, and especially the third postulate in that speech, are wholly inapplicable to the description of cases I now speak of.

2nd. If it be true, and it is a point I do not question, that in scrofulous caries of the hip, or of any other joint, occurring as they most frequently do in youth, nature often effects wonderful changes by the removal of diseased structures, and by the restoration of lost parts of a magnitude seemingly incredible, it is also true that such diseased structures may sometimes be more quickly and more advantageously removed by the knife, the aptitude for their restoration being in no way infringed on or diminished by an operation; and this has been proved over and over again in those bold operations on the elbow-joint, well known to all surgeons; operations so often repeated, and with such success, as clearly to warrant similar attempts to bring within the domain of legitimate operative surgery, the excision of the carious pelvic extremity of the femur.

3rd. It was objected, with a great show of truth, by most of the speakers, that the removal of local disease could not cure the constitutional taint in the class of diseases I now advert to. But the same remark applies precisely to operations on the elbow-joint, knee-joint, and all other joints similarly effected; and yet no surgeon hesitates to excise the extremities of the diseased bones in elbow-joint cases, or to amputate in cases of white swelling, although he be not in the least assured that the constitutional taint has ceased, and I should be glad to be informed of the pathognomonic symptom which is to assure the surgeon on that point. He may, or he may not, remove the whole of the affected structure (I think it very questionable if in any case he does); at all events, he does not remove the constitutional taint by snipping off the ends of the radius, ulna, and humerus; this, I hope, will not be maintained, even by the gentleman who made the observation; and yet these cases do admirably; the wounds made by the surgeon heal, and the extremity may, and often does become a useful limb; and in amputations life is saved. It would almost seem as if the operation had determined the solution of the constitutional disease, and terminated it. As no surgeon, then, pretends to wait for the cessation of the constitutional taint before he operates on a diseased elbow-joint, neither is he bound to follow such a course in morbus coxarius. Moreover, as I have shown, he can never know when the constitutional taint has ceased.

4th. That operations not strictly warrantable by the existing circumstances of the case, as a more advanced knowledge shows, have been performed, I am free to admit. But the history of the introduction of each important operation is full of such errors. This, however, is not the question, which really is the discovery of the fitting cases for the adoption of the operation; and this is only to be effected by multiplied physiological and pathological observations, and by careful discrimination of symptoms.

To say that we "must not operate whilst active mischief is going on," is an observation that scarcely requires any refutation. The surgeon must operate when the life of the patient is in danger. In white swelling, in diseased elbow-joint, in traumatic mortification, the exhaustion of the frame, so happily alluded to by the last speaker, "as a symptom not merely of the existence of an incurable local malady, but of a constitutional disease," must be met, no doubt, by general treatment. But the surgeon need not, for this reason, neglect the favourable moment for removing a local malady, which, if it do not cause, yet certainly aggravates, the sad condition of the patient.

I am, &c.,

HAYNES WALTON.

Grosvenor-street.

To the Editor of 'The Institute.'

SIR,—There can be no doubt that your principle of unity is the true one, and that we should all strive at the establishment of a National College of Medicine, of which the fundamental principle should be the union under one head of all branches of the Art of Healing. There should be a College so comprehensive that it should comprise all who practise generally, or any branch of Medicine or Surgery. All should begin as Members or Fellows of such a corporation, being at full liberty afterwards of selecting any one branch of practice and becoming members or fellows of a Special College. Nor do I see anything incompatible with the continued existence of the present corporate bodies.

The Colleges of Physicians and Surgeons may be considered as Associations of individuals for particular purposes, and their names indicate their respective objects. They are Institutions for the association of men calling themselves Physicians and Surgeons, and are perfectly compatible with an Institution founded on the broadest principles for the promotion of all the sciences and arts connected with medicine. A College founded on such general principles must be considered as a national object, and a desideratum for the welfare of the whole community, while the Colleges of Physicians and Surgeons are very proper for the enrolment of those who select particular branches of practice. The old institutions might still continue to foster, as they always have done, particular or selfish objects, while the new institution, from its very comprehensive nature, must necessarily extend its views to the general good. If we are to have another selfish College, if the wisdom of the day will not look higher and give us a College of Medicine of a truly national character, I would beg your attention to the following observations.

We all know the importance of a name, and it is clear that the weakest part of the cause of the General Practitioners arises from this circumstance. Might we not at once call ourselves "Doctors," or General Practitioners in Medicine and Surgery? I am inclined to think that it might be wise to establish an association of "Doctors," one rule of the society being that every member should put on his brass plate, "Mr. —, Doctor." The title would appear at first quaint and singular, but it is wonderful how time reconciles us to a name; it would soon be understood by the public to designate that class which devotes itself to the general practice of medicine and surgery, and takes smaller fees than physicians and surgeons. For example, one of my patients may be talking to a friend of her medical adviser. "What is he?" says the friend. "He is a Doctor," certainly sounds better than—"He is a General Practitioner of Medicine and Surgery." The two friends might be supposed to continue the conversation. A. says, "I employ a physician, which I prefer, because I know my expense, whereas the bills of your General Practitioners are unlimited." "Nay, but," says B, "this new society of Doctors have defined their charges, and you are not subject to the uncertainty of the old apothecaries." Doctors are better acquainted with the treatment of ordinary diseases, particularly of children, than either physicians or surgeons, who generally take up one particular subject on which their special advice may be called for when required. It is common enough now for people to say, "My doctor advised so and so," where others would have to say, "My physician" or "my surgeon." I have no doubt that if such a society was established, the common sense of the public would come into it, as an excellent arrange-

ment. It need excite no jealousy, either in physician or surgeon, and the name is now commonly used in the country.

If we established a society of "Doctors" or "General Practitioners of Medicine and Surgery," the latter part of the title would die away in a few years. There must always be a class of General Practitioners, and the distinguishing feature would be that the "Doctor" would supply his own medicine. I feel confident that in five years the name of Doctor would be recognized, understood, and universally adopted; and I see no reason why a primary association should not at once be established, into which all qualified men should be allowed to enrol themselves. The society might combine the advantages of a club, like the Law Institution in Chancery-lane. Have we public spirit enough among us to form such an Institution, and to make it an intellectual and scientific resource for our present scattered and disunited body.

B. L. I.

To the Editor of 'The Institute.'

MY DEAR SIR,—I have read with great interest and much satisfaction, your able Editorial Articles on "The Coroner's Court;" and my attention has been especially arrested by the force of your reasoning, on the paramount necessity which there exists, in the official arrangements of a Coroner's Court, for the appointment of a *Medical District Officer*.

The situation in which I found myself placed some months ago, presents from a different point of view, another and a striking illustration of your cogent reasoning on the important subject:—I had been suddenly called to visit a poor woman in an ill-ventilated chamber, of a close, dirty street, in my immediate neighbourhood, whom I found in the last stage of malignant *puerperal fever*, and who did not survive my visit many hours. Idle rumour had done its work, for the next day I was served with a summons from the Coroner of the district, to make a *post-mortem* examination, and to give evidence as to the cause of death at the inquest. To one like myself, most extensively engaged in the practice of midwifery, this was anything but an acceptable office.* I seriously pondered the question in my own mind,—Is this summons compulsory? And I should be glad to be favoured with your opinion on the subject. I felt that I ought not to shrink from the performance of any duty, which my professional position demanded at my hands; but, at the same time, I could not silence the questions, ringing in my ears—"Can you make this *post-mortem* examination, without incurring risk to others?—and ought you to incur such risk?" It was just possible that I might have been required to have gone from the examination to attend another labour. Fortunately, this was not the case; I took all possible precaution, and dressed myself in *outer garments*, which I never wore again, and no evil consequences followed. But few know better than yourself, Sir, the sad and direful consequences which have followed in the wake of *puerperal fever*, and how unsuspectedly, at times, the contagion has been conveyed. I need not enlarge upon this subject, but it is essentially, as you truly say, our duty to enlighten others; and thus, by becoming the *safeguards*, to secure the confidence of the public.

I am, my dear Sir, Yours truly,
A GENERAL PRACTITIONER.

January 8, 1851.

To the Editor of 'The Institute.'

CASE OF POISONING BY NUX VOMICA.

ON Sunday, the 30th of June, 1822, I was called upon to examine the body of a child, who, it was suspected, had been poisoned on the previous Friday.

The following are the appearances which presented themselves:—The sides of the head and the ears, the arms from the shoulders to a little below the elbows, the sides of the body, the back, and the upper part of the thighs, were of a dark purple hue; the lips nearly of the colour of a ripe mulberry; the anterior part of the scrotum of a bright red, and that part of it which was resting upon the thighs, purple. The nails of the fingers were also of a deep purple, approaching to black; those of the toes were not much discoloured.

The head and limbs of the child were well proportioned, and he was of a full size. No fetid or unpleasant scent was perceptible, nor was the abdomen tumid.

On depressing the under-jaw, I observed the tongue to be coated with a yellowish fur, but no extraneous substance was adhering to any part of the lining membrane of the fauces.

* Most gladly would I have relinquished the fee with the duty.

Upon opening the abdominal and thoracic cavities, all the viscera were found in a healthy state; the only thing which attracted notice was a slight degree of vascularity upon the upper curvature of the stomach, not sufficient, however, to be termed inflammatory.

The intestinal canal was secured with ligatures at both extremities, and removed from the body, together with the heart, lungs, and trachea, and the whole taken to my residence for the purpose of being minutely inspected.

The upper portion of the oesophagus was of a deep red colour, which, however, gradually became paler towards the stomach. The contents of the stomach were next pressed into a graduated glass; these contents did not measure more than half a drachm, and consisted chiefly of a reddish mucus, probably nothing more than the secretions of its inner coat, but amongst them were found two pieces of a horny-looking substance (which I afterwards ascertained to be *nux vomica*), weighing something less than one grain.

The contents of the small intestines were next collected and examined; altogether these amounted to three drachms, and with them were found sixteen pieces of *nux vomica*, weighing in a wet state seven grains.

The large intestines contained nothing but meconium.

The history of this case, together with the pieces of *nux vomica*, I transmitted to the late Dr. Gordon Smith, from whom I received the following reply. As this letter forms an interesting little piece of autobiography, and may also serve to call the attention of medical men to a most important subject—"The pulmonary evidences of infantine vitality"—I give it entire. This lamented and highly-gifted physician did not live to publish the case—at least I am not aware that he did.

"London, January 8th, 1825.

"DEAR SIR,—I would have availed myself of an earlier opportunity of acknowledging the receipt of your favour, had not absence from town for some time after its arrival, and continued illness during the temporary visit I am now paying, prevented me from performing almost any duty that did not come under my immediate exigences. I am also obliged to you, and the more so as *personally* a stranger, for your kind expressions in regard to my health. I labour, and have long laboured, under severe irritability of the stomach, which assumes the regular tertian type, confining me to bed one day, and leaving me in a manner perfectly well the other. This has rendered it necessary for me to give up residence in London; and I am about to remove to Retford in Nottinghamshire, coming occasionally to town for the promotion of some literary projects of a professional nature, which I must endeavour to forward.

"The case with which you have favoured me is a very singular one. We are not strangers to the poisonous action of *nux vomica* in the adult, but, as a *modus necandi* in child-murder, it is, I doubt not, without parallel, and proves that the instance in question was a horrible exception to those in general falling under the denomination of Infanticide. I shall gladly put it on record in your name, and shall probably have an earlier opportunity than my projected work on Prolicide will afford, in one I am somewhat advanced in, of a practical nature, on poisons.

"I should be grateful for a case or two in reply to the queries you have seen. The profession, I am sorry to say, does not seem to appreciate the importance of these matters sufficiently, even so far as they themselves are concerned. But I am fully persuaded that the duties of the medical practitioner in courts of justice will very soon change their complexion, so rapidly is the study of state medicine advancing.

"I should indeed be glad to bestow any labour for the assistance of my brethren, and if I could work alone I should not trouble them for co-operation. But, in regard to pulmonary evidence of vitality, an individual cannot have facts enough on which to build practical inferences; and there is no problem that medical men have shown themselves less able and less willing to solve, than the one is question.

"I remain, dear Sir, yours, faithfully,

(Signed) "J. G. SMITH."

At the time of the occurrence of the case above narrated, the tremendous powers of strychnine, or *nux vomica*, were but little known, or even suspected; indeed, it was regarded as a mild poison, strong enough to kill mice and small birds only; and it was commonly believed in this county, that it would only destroy animals that came into the world "with their eyes shut." I was, in truth, asked by a sapient grand jurymen, whether I was not aware of this being the *fact*; and when in my simplicity, I replied, that if a poison were introduced into the stomach, it would pro-

duce its specific effects, whether the animal came into the world blind or not blind, my opinion was received with an incredulous stare by some, and with looks from others, which said as plainly as looks could speak, "We pity your ignorance." A few months after the occurrence of this case, a young woman in the neighbourhood of Newmarket, destroyed herself with nux vomica, in powder, when it began to be admitted, that it might not be quite safe to swallow a poison even with the eyes open.

I have reason to suspect that not only nux vomica is resorted to for the destruction of infants, but that other reputed *mild* poisons are used for the same diabolical purpose, and in so cautious a manner, as almost to defy detection. The horrible wholesale use of arsenic in Norfolk, Essex, and Somerset, formed at one time the subject of exciting conversation amongst all classes of society, high and low, rich and poor.

The following dialogue was one day reported to me:—

"Well, I wonder they should be such fools as to use white arsenic. If they use white arsenic, they are sure to be found out one time or other. If they had used yellow ochre (yellow orpiment), they would never have been found out."

"What do you mean?" inquired another woman of the person who commenced the conversation—"What do you mean, I can't understand it?"

"Why, if a little yellow ochre is scraped into the child's pap, and given to it every day, for two or three months, it will pine away and nobody the wiser for it."

The woman who made this disclosure is now in her grave, but is it not to be apprehended, that the villany she taught, she did not scruple to execute? What a fearful prospect is thus opened to our view; and how imperatively does it call for stringent legislative enactments to regulate the sale of poisons.

To conclude this dark page in the history of human depravity. When I inquired into the manner of the child's death, whose *post mortem* examination I have detailed, a mysterious silence was observed by the attendants, and all I could elicit was, "that it was sick once or twice, and died in strong convulsions."

To this circumstance may be attributed the discolorations upon the surface of the body.

I remain, Sir, yours, very respectfully,

JAMES BEDINGFIELD.

Longville House, Needham Market, Suffolk.
January 14th, 1851.

THE PHILOSOPHICAL GAZETTE.

ON THE BEST PREPARATION OF ARSENIC FOR INTERNAL ADMINISTRATION,

AND ON THE CHEMICAL COMPOSITION OF FOWLER'S SOLUTION.

By LLOYD BULLOCK, Esq.

DURING several years past, I have from time to time been asked by practitioners, both in town and country, whether no better and more convenient form of arsenic could be recommended for internal administration than the liquor arsenicalis of the Pharmacopœia. It appears to be the opinion of many who employ arsenic, either as an anti-periodic, or against skin diseases, that the official preparation is uncertain in its action—what is usually deemed a small dose in some cases acting with violence, whilst, in others, large doses produce but little effect. This may, doubtless, in a great measure, be referred rather to peculiarities of constitution in the patient, than to differences in the preparation. Nevertheless, the mode of preparing the liquor arsenicalis adopted by all the colleges, belongs to a period antecedent to the present state of chemistry, which demands, in all cases, precision, and the rejection of every process either vague in itself, or admitting the possibility of failure to obtain the intended result. In the instance of the solution of a metallic salt, the maintenance of a certain standard strength being always the desired object, it is certainly always desirable, if possible, first to obtain the salt in a crystalline form, and then, being assured of its purity, both by its chemical and physical characters, to dissolve it in an exact amount in the necessary proportion of menstruum. On this principle I have for several years recommended the employment of the arseniate of soda, a salt which has all the required characters of great solubility, definite form, and the additional pharmaceutical advantage of being readily made into pills, in such a manner as to ensure every pill containing any given fraction of a grain with perfect accuracy. Moreover, it may be kept in a crystalline form, and dissolved readily, as it is required. Of the arseniate of soda I have received reports from a great many practitioners, invariably favourable as to its therapeutic effects.

The use of arseniate of soda in medicine is nothing new. It is the basis of Pearson's solution, which consisted of one grain of

arseniate of soda to one ounce of water. What the reasons may be which led to this salt having been hitherto omitted from the Pharmacopœia, I am unaware.

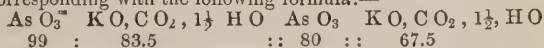
About twelve months ago, my attention was particularly directed to the liquor arsenicalis by a physician, who was dissatisfied with its effect, and, at his suggestion, I was induced to look more closely into this preparation. The directions of the Pharmacopœia for preparing liq. arsenicalis are as follow:—

"Take of arsenious acid, broken into small pieces, carbonate of potassa, each eighty grains; compound tincture of lavender, five fluid drachms; distilled water, a pint. Boil the arsenious acid and carbonate of potassa with half a pint of the water in a glass vessel until they are dissolved. Add the compound tincture of lavender to the cooled liquor. Lastly, add besides, of distilled water, as much as may be sufficient, that it may accurately fill a pint measure."

I made the following experiment:—

1. Taking 80 grains of arsenious acid in coarse powder, 80 grains of carbonate of potassa, P.L., and 10 ounces of water, I found a perfect solution effected on heating to 212°, with the evolution of only a trace of carbonic acid.

2. The solution was then boiled until it ceased to give off carbonic acid; it required about twenty hours; an equivalent of the carbonate of potassa was decomposed, forming arsenite of potassa, corresponding with the following formula:—



99 : 83.5 :: 80 : 67.5

It would appear, therefore, that the liquor arsenicalis of the Pharmacopœia is a solution of arsenious acid in carbonate of potassa, with a minute quantity of arsenite of potassa. On looking through all the dispensatories, and commentaries on the Pharmacopœia, I was surprised to find no allusion to this fact. Soubeiran, however, notices it; but no other French writer on pharmacy, subsequent to Soubeiran, that I am aware of.

If it be desirable to give arsenious acid with carbonate of potassa, the following process will give a uniform preparation:—Take eighty grains of arsenious acid in coarse powder; eighty grains of carbonate of potassa, P.L.; compound tincture of lavender, five fluid drachms; distilled water sufficient to make up twenty ounces. Boil the arsenious acid in fifteen ounces of water until dissolved, remove it from the fire, allow it to cool a few minutes, and add the carbonate of potassa dissolved in four ounces of cold water; when the temperature of the mixture is reduced to 60°, add the compound tincture of lavender; lastly, make up exactly to twenty ounces with distilled water.

It is probable that many gentlemen may wish to prescribe a true arsenite of potassa, a salt they supposed they were exhibiting in the liq. arsenicalis of the Pharmacopœia. To distinguish this salt from Fowler's solution, it may be called liq. potassæ arsenitis neutralis, and instead of sp. lavand. co., a small quantity of a distilled spirit could be used. The liquor potassæ arsenitis neutralis may be prepared by taking 80 grains of arsenious, and 67.5 grains of carbonate of potassa, P.L., or 81.6 grains of crystallized bicarbonate of potassa. Boil in ten ounces of water until no more carbonic acid is evolved; when cold, make up to exactly twenty ounces, with distilled water, and if thought desirable, a small quantity of a distilled spirit.

There appears to be a variety of opinions as to the best form of giving arsenic. Mr. Hume and others, vide *London Medical and Physical Journal*, vol. xxiv., would prefer binarseniate of potassa, but I find that this compound, which was admitted into the former edition of the Dublin Pharmacopœia, is now omitted.

The binarseniate of potassa is a beautiful salt, easily prepared; keeps well, and from its fine crystalline form its purity is readily ascertained. It would be well if some satisfactory reasons were given for the rejection of this salt.

M. Boudin considers a simple solution of arsenious acid in distilled water as the best; whilst Bieto prefers arseniate of ammonia. There is also a solution of arsenic in some repute, known as DeValangin's solution of solvent mineral, which is a solution of arsenious acid in hydrochloric acid.

It appears to me that the weight of testimony is in favour of arseniate of soda. M. Cazenave speaks highly of it; and upon the whole I should say it is probably milder in its action than other forms of arsenic, and, as far as I know, is devoid of objection.

The best method of administering the arseniate of soda is in the form of pills, made up with crumb of bread, or some inert powder.

In conclusion, I think I cannot do better than quote Dr. Powell, who, writing on arsenic, observes, "when the dose is small, and the effect so powerful, the most minute attention to its proportion and preparation becomes necessary."—*Lancet*.

Conduit-street, Dec. 1850.

MEDICAL INTELLIGENCE.

MEDICAL SOCIETY OF LONDON.

December 28, 1850.

Dr. J. R. BENNETT, President, in the Chair.

CONVULSIVE COUGH.

DR. OGIER WARD read the details of a case of convulsive cough in an infant eleven months old, which terminated fatally. The case was at first regarded as the whooping cough, more especially as an elder brother was similarly affected. The treatment consisted in lancing the red and tumid gums, the application of one leech to the head to relieve the congestion, and afterwards, there being but little congestion of the lungs, the exhibition, internally, of the ferri ammonio tartaras with the hydriodas potasse, and a stimulating liniment to the chest, as pulmonary tuberculosis was dreaded. The leech-bite bled freely, and the infant was greatly blanched by the loss of blood. The convulsive character of the cough, as well as the absence of the whoop, then led to the suspicion that there was some affection of the brain modifying the cough; this view was strengthened by the prominence and hardness of the fontanelles, and by a slight convulsive action of the eyes after a fit of coughing. As depletion could not be pushed further, hyd. c. creta and salines were accordingly given. From this time, each paroxysm of coughing was attended or followed by a convulsive spasm, in which the limbs were stretched, the hands clenched with the thumbs inside, the head turned to one side, and the eyes distorted. Complete opisthotonos and trismus occurred two days before death.

Secitio cadaveris, thirty-two hours after death.—Fontanelles sunk. Body emaciated. Brain not congested, nor was there any fluid under the arachnoid at the upper part; on the contrary, the brain was dry; ventricles distended with serum, and the brain around softened almost to diffidence, but in no part was it redder than usual. The membranes at the base of the brain and the choroid plexus were thickened with crude tubercular matter, quite recent, and studded over with miliary tubercles. Lungs filled in every part with miliary tubercles, and a large patch of crude tubercle on the pleura of the middle lobe of right lung. Upper and middle lobes emphysematous to an extreme degree, the air-vesicles being distended, as well as the interlobular areolar tissue. Spleen full of tubercles of various sizes, and in different stages of growth. Mesenteric glands universally converted into tubercle, but all in the crude stage, varying in size from that of a pea to a large nut. The rest of the viscera were healthy. The points that appear most worthy of notice in this case are, first, the fact of tuberculosis being set up in an unweaned child from a temporary indisposition of the mother; next, the influence of teething, in determining the tuberculosis to the cerebral membranes, and the convulsive character thus impressed upon the cough, so as to completely assimilate it to pertussis, except in the omission of the whoop; thus proving by analogy, the influence of the brain in the production of that disease. Thirdly, the effect of the softening of the brain, and the tubercular inflammation of the membranes at its base, especially the latter, in causing the tetanic spasms of opisthotonos and trismus. Fourthly, the peculiarity of the respiration in this and other cerebral affections, characterised by its irregularity, though with a certain rhythm, a long inspiration being followed by several short inspirations and expirations, and terminating in a long expiration. Lastly, in the disproval this case affords of the incompatibility of emphysema with tuberculosis of the lungs.

THE PHYSIOLOGICAL PROPERTIES OF Picrotoxine.

A paper by Dr. Glover, of Newcastle, on the physiological properties of picrotoxine, was then read. The author commenced by detailing seven experiments, the animals experimented on being dogs, a she ass, a pigeon, a frog, a rabbit, and a gold fish. The results in each experiment, and the *post-mortem* appearances were alike, namely, retrograde movements, shown in a slight degree by convulsive twitches of eye, head, neck, and shoulders backwards, and in an extreme degree by a regular forced retrogression, salivation, and general tremors, bloody stools, laborious breathing, rapid action of the heart, and opisthotonos. The autopsies revealed total extinction of the muscular irritability, with great heat of the muscular fibres, the thermometer rising to 115 degrees; irritability of heart, more so of the auricles than of the ventricles, both cavities being distended with black fluid blood; the lungs slightly congested: the stomach and intestines showing marks of irritation, great congestion of the brain and its membranes, especially of the lower portions,—the cerebellum, corpora quadrigemina, and upper part of the spinal cord, with much bloody serum in the ventricles.

The dose of picrotoxine given to the dogs varied from 1 to 2 scruples; to the ass, 100 grains; to the pigeon 4 grains; to the frog, 5 grains; and to the rabbit, 10 grains; 5 grains were placed in the water containing the gold fish, but the picrotoxine is very insoluble in water. In all these experiments it was either given by the mouth, or inserted under the skin of the axilla or groin. The author next proceeded to compare the results of his experiments with those made by M. Flourens on the removal of various parts of the brain, especially of the corpora quadrigemina and cerebellum. The resemblance, he remarked, was very striking. To prove this, a quotation was made from Cuvier's report to the Institute on Flourens' experiments, and the following conclusions were drawn by the author as the legitimate deductions from the results of his experiments:—1. Picrotoxine has the power of determining peculiar movements and effects very similar to those described by M. Flourens as resulting from sections of the cerebellum, and perhaps of the corpora quadrigemina. He did not think, however, that the animals in his experiments were blind until just before death, if then, as in the cases where Flourens cut away the corpora quadrigemina. The iris was certainly in some cases contractile, until the symptoms became very severe, when the pupil was enormously dilated. 2. Picrotoxine also acts powerfully on the spinal cord, and generally is a narcotico-acrid poison. 3. It is not one of those active principles so very energetic, that is to say, in such small doses, like conia, aconitina, &c., although a most terrible poison. 4. The animal temperature was much increased in some of these experiments, forming in this respect, a great contrast with some facts Dr. G. observed several years ago, showing the great diminution of temperature undergone by animals slowly poisoned by the chloride and bromide of olefiant gas, chloroform, bromoform, &c. How far the increase of temperature was owing to the excitement of the nervous system, he (Dr. Glover) would not decide. The peculiar movements caused by picrotoxine, Dr. Glover thought, were neither reflex nor voluntary, but should be considered a third kind of motion; and he stated, with respect to the *cui bono* of his experiments, that it is our duty to investigate, often without a direct reference to that in the first instance. Everything that is true generally finds some useful direction. When he some years ago called attention to the remarkable physiological properties of chloroform, then scarcely known, who would have supposed it likely to become in such general use?

Dr. Cogswell remarked, with reference to the general results of these experiments, that they tended to narrow the question in medico-legal inquiries, as to the susceptibility of the lower animals to the same poisonous influence; corresponding effects being here seen to be produced in animals belonging to the four classes of vertebrata. He had never observed from the action of other poisons such movements as the author stated to be occasioned by picrotoxine, and compared to those resulting from the removal of the cerebellum. While these movements and the *post-mortem* appearances seemed to denote that the latter organ was excited, it was singular that the motory phenomena should agree with those arising from its withdrawal in the experiments of Flourens. An important difference of opinion existed with regard to the elementary constitution of picrotoxine, some having affirmed it to contain nitrogen, and thus to agree with the other vegetable principles which most peculiarly affect the nervous system, but this conclusion was not sustained by later investigations. The heart was stated to have been found irritable after death from this poison, in which respect, as well as in its action on the spinal cord, it agreed with strychnine. As regarded the condition of the heart, he might also mention that in experiments with chloroform, this organ was found pulsating in frogs after voluntary motion had ceased, which seemed so much opposed to the conclusion of those who attributed death from chloroform to primary depression of the heart's action, that he would like to hear the cause of the discrepancy explained.

Dr. Snow said that he believed all narcotics were capable of destroying the irritability of the heart and of the muscular system in general, and also of arresting the peristaltic action of the intestines; he had, at all events, ascertained this to be the case so far as regarded alcohol, ether, and chloroform, but it required a larger dose to destroy the muscular irritability than merely to arrest the breathing. When animals of warm blood were killed by chloroform, breathed gradually, the heart remained irritable after death, but as frogs continued to absorb the vapour by the skin after they ceased to breathe, the irritability of the heart could be destroyed in this way, as it could in other animals by opening the body and directing a stream of vapour on the heart. The peristaltic action of the intestines and the irritability of any particular muscle could also be removed by the local application of the vapour, and by injecting the arteries immediately after death, with spirit and water,

or a solution of chloroform in water, the irritability of the muscles of the whole body was at once destroyed. In such cases, the *post-mortem* rigidity came on within five minutes, whilst the body was still warm, and he had found it to remain between two and three weeks, and believed that it could be prolonged to an almost indefinite period; putrefaction being, at the same time, prevented. M. Robin, of Paris, had ascertained that chloroform and a number of other narcotic substances, had the power of preventing putrefaction in animal matter.

Dr. O. Ward commented on the similarity of symptoms attendant on poisoning by picrotoxine, and the disease called the distemper; there being in both, running backwards, opisthotonos, greatly increased flow of saliva, discharge from the bowels, &c. In distemper, he had been told, there is softening of the spinal nerves, and he thought it a question of some interest, whether the same morbid condition of the nerves was the sequence of the vegetable, as of the animal poison.

Dr. Cogswell reminded Dr. Ward that the author had mentioned congestion of the brain, especially of the cerebellum, corpora quadrigemina, &c., as the morbid change induced by the toxic influence of picrotoxine.

Dr. Garrod was of opinion that the interest of the paper would have been increased, had it contained a short account of the substance operated on, with remarks on its nature, and its physiological and chemical influence. It should also have been stated where it was procured; he knew that the alcaloids were often much adulterated; indeed, he had found that aconitine and conia, procured from Germany, produced much less effect than those obtained from Morson. It was the more needful to have an explicit account respecting picrotoxine, because cocculus indicus contained two other principles, which might be used to adulterate the picrotoxine, or even as a substitute for it. The doses used by Dr. Glover were, he thought, exceedingly large, picrotoxine being a very powerful poison.

Dr. Semple regarded the uniformity of action in Dr. Glover's experiments, as a proof of the genuineness of the drug.

Dr. Routh spoke of Dr. Glover's reputation as a scientific chemist, as a guarantee that he would not employ other than a genuine drug in his experiments. Alcaloids may influence the system differently in different persons; some tolerating larger doses than others, the drug still being genuine. He considered the great interest of the paper to consist in its confirmation of the opinions offered by Dr. Forbes Winslow at their last meeting. The effects of the poison were similar to those caused by the destruction of part of the brain. This fact, he thought, might be useful in practice, as it shewed that the most serious symptoms might result from mere congestion of the brain, or from the state of the blood. The cures sometimes effected under such circumstances, may therefore be explained by the removal of the congestion, or of the toxic agent from the blood.

Dr. Cogswell observed, in reply to Dr. Garrod, that the picrotoxine, used by Dr. Glover in the experiments detailed in the paper, had been procured from Mr. Morson.

Dr. R. Bennett was of opinion that the great prevalence of nervous diseases among the poor might be caused by the large quantities of beer they drink, and its adulteration by cocculus indicus. Dr. Glover's experiments showing its action on the nervous system. At St. Thomas' Hospital none of the alcaloids were ever given to the out-patients. He had seen alarming symptoms follow the use of aconitine in rheumatism.

Mr. Canton recommended the examination of the throat in cases of poisoning by strychnine; he had seen it cause redness and sloughing of the fauces, with ptialism. Indeed, in a case under the care of a physician practising in this city, when ptialism could not otherwise be induced, the combination of minute doses of strychnine with the mercury speedily succeeded.

January 4th, 1851.

DR. BENNETT, President, in the Chair.

PERFORATION OF THE STOMACH—ULCERATION OF THE GASTRO-EPIDIDYMIC VEIN—DEATH BY HEMORRHAGE.

Dr. ROUTH exhibited a specimen of a man's stomach perforated in the great curvature. The case was that of a man, aged 60, who had usually enjoyed good health. Some time back, he suffered from considerable pain in the stomach, for which he was salivated to an unusual degree; some sloughing, with considerable edema of the tonsils and larynx, resulted from this treatment. Dr. Routh did not see him till about ten days after. The symptoms were those of gastrodynia, with considerable weakness. There had been slight hemoptysis, but, the lungs being sound, the hemorrhage was attributed to the disease of the throat. This on exami-

nation was found to be reddened, with some tenderness over the larynx, and difficulty of swallowing. The abdomen was soft, with some pain on pressure in the cardiac region. Bowels much constipated. He was ordered a soothing laxative, a draught with prussic acid and gentian, a blister to the stomach, and a gargle. Under this treatment he gradually improved, the gastric pain almost entirely disappearing. The throat symptoms were very much diminished, two leeches having been applied to the laryngeal region, and a blister on the nape of the neck. He continued under treatment for about three weeks, and appeared to be improving, when, on Wednesday last, he was seized with a fit, and died in about twelve hours. Dr. Taylor assisted at the *post-mortem* examination, thirty-six hours after death. Lungs healthy; apex of left lung containing a small dark cretaceous plate. Heart small and flabby; one of the tricuspid valves somewhat thickened; the right auricle exceedingly thickened; the other valves healthy. Liver large, with fatty degeneration. Kidneys with cysts and fatty degeneration. Intestines of rather a dark colour. The stomach was full, and contained about three quarts of blood, partly liquid and partly in clots; about the centre of the greater curvature was a large hole, through which the index finger could be passed downwards into a considerable mass, involving the diseased mesenteric glands and a portion of the pancreas. There appeared to have been some ulceration or an abscess in this mass, which, in bursting into the stomach, had involved the gastro-epiploic vein, and thus caused death by hemorrhage.

EXFOLIATION OF BONE AFTER AMPUTATION.

Mr. Gay exhibited a ring of bone taken from the end of a stump three months after amputation. Mr. Gay had, on a previous occasion, taken away a similar ring, consisting of compact texture, having the entire sharp edge, which is left after sawing the bone through; and he thought that these exfoliations were more constant than was expected, and that they accounted for the sinuses which sometimes delayed the healing of stumps. Another preparation produced was that of the end of the femur after amputation had been performed eight days previously. In this the periosteum had shrunk irregularly from the extreme edge of the bone, leaving from a third in some parts to a line in others exposed, and evidently ready to exfoliate. Mr. Gay regarded this as one of the processes by which the ends of the bones are, after amputation, rounded off, in accordance with nature's general plan, and advises, in order to avoid the tediousness of the process, that the edge of the bone be either sawn, nipped, or filed off at the time of the operation.

CASE OF INTERNAL STRANGULATION.

Mr. Hancock related a case of internal strangulation, which presented the usual symptoms of constipation, vomiting, swelling of the abdomen, &c. He was requested to see the case by Mr. Brown, of Lewisham, who agreed with him as to the propriety of performing an exploring operation for the relief of the internal constriction, whatever that might be. After a very careful examination, Mr. Brown directed attention to a spot on the right side, about three inches above Poupart's ligament, which presented an unusual feeling to the touch, and, as no abnormal signs presented elsewhere, it was decided to operate in that situation. Accordingly, Mr. Hancock carried an incision from rather more than an inch above the anterior superior spinous process of the ilium towards the rectus abdominus muscle, ending above the external abdominal ring. After dividing the layer of muscles and fascia transversalis, the peritoneum was found to bulge. This was laid open, exposing a knuckle of congested and constricted intestine, but the constriction could not be detected until the gut had been drawn down for about two inches, when the band, which was exceedingly tough, was divided. The patient, however, only survived the operation a short time. No other band or adhesion was found after death. In another case to which Mr. Hancock had been called, but in which the patient refused to submit to an operation, the cause of constriction was found to exist in the appendix vermiformis adhering by its apex to the cæcum, and a portion of the ileum protruding through the ring thus formed. Although these cases terminated fatally, Mr. Hancock submitted them to the society, as he was in hopes, that if the several cases of internal strangulation occurring in the practice of individuals were recorded, the attention of the profession would be directed to the propriety of more early surgical interference than is usual, and patients be thus afforded a better chance of recovery. At the same time, he acknowledged that the diagnosis in these cases was frequently very obscure, the symptoms being for the most part of an unsatisfactory and negative character.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, January 18, at 8 P.M.
STATISTICAL,	Monday, do. 20, at 8 P.M.
CHEMICAL,	do. do. 20, at 8 P.M.
LINNÆAN,	Tuesday, 21, at 8 P.M.
ZOOLOGICAL,	do. do. 21, at 9 P.M.
PATHOLOGICAL,	do. do. 21, at 8 P.M.
GEOLOGICAL,	Wednesday, do. 22, at 8½ P.M.
ROYAL,	Thursday, do. 23, at 8½ P.M.
MEDICAL (OF KING'S COLLEGE)	do. do. 23, at 7½ P.M.
[On Fatty Deposits. By Albert D. Smith, Esq.]	
ROYAL INSTITUTION,	Friday, do. 24, at 8½ P.M.
MEDICAL,	Saturday, do. 25, at 8 P.M.

THE INSTITUTE MEDICAL JOURNAL.

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THE INSTITUTE.

LONDON, SATURDAY, JANUARY 18, 1851.

It is not from any feeling of complacency towards Homœopathy that we have admitted the criticism of "*SUM CUIQUE*," upon Dr. GARDNER's paper on the use of Belladonna in Scarlet-fever; but simply because we conceive it may be expedient in certain questions of fact to hear both sides. Dr. GARDNER will scarcely reply to an attack which, to most of our readers, will appear to confirm rather than impugn his statements. If Hahnemann suggested the use of belladonna, on the ground stated by his followers, he could not exhibit greater weakness, and if homœopathsists administer the expressed juice of the plant in doses "of a drop or less of the third to the sixth dilution of the tincture every day, or every second or third day," as their jargon runs, we think any one is perfectly justified in asserting that they leave the disease to the unaided efforts of nature, an inference further justified by the assertion of our correspondent, "that there are cases in which it is of no use, and for which other remedies are required."

We are ourselves perfectly satisfied that homœopathy as a system is based solely upon misconception and ignorance; and we have good reasons for asserting that its practice is more frequently associated with fraud than some of its adherents are aware. Professing to attach the utmost importance to the accurate division of the remedies they employ, into quantities which surpass the power of the most acute senses or the most delicate physical instruments to detect or to estimate, homœopathsists are constantly detected giving morphia, arsenic, tartar emetic, and other agents of equal potency, which may be easily concealed, in full and even

dangerous doses. And, as would appear from an example published by Dr. ALFRED TAYLOR, the people they entrust with the preparation of these drugs are so careless or incapable, as to make the powders of the same packet vary from one-eighth to one-half a grain of morphia.

It may, however, be alleged, that these facts arise from mere accident, or at most as indications of an imperfect faith in the system which greater adepts condemn as a weakness, whilst they would avow more assured convictions and honest purposes. With the latter class only can arguments avail, and to such we would suggest that their fundamental principle, namely, that the power, energy or force of any agent for any purpose can be augmented by any division of the amount of the agent, is opposed and contradictory to every established law of physics. Every ponderable element or compound exerts its action on every other with more or less energy in the precise ratio of its quantity. The same law holds with the imponderables, light, heat and electricity. And although the action of many agents is still very energetic in quantities so minute as to touch the very verge of our power of estimation, whether by means of the balance or otherwise, there exists *nothing* the force of which is not augmented by an increase of its quantity.

When homœopathsists talk, after their master, of billionths or even of millionths of grains, it scarcely admits of an answer other than "they know not what they say nor whereof they affirm," as the following passage from a recent writer evinces:—

"A billion of moments have not yet elapsed since the creation of the world,—and, to produce a decillion, that number must be multiplied by a million seven separate times. The distance between the earth and the sun is ninety-five millions of miles; twenty of the homœopathic globules, laid side by side, extend to about an inch, so that 158,400,000,000 such globules would reach from the earth to the sun. But when the thirtieth dilution is practised, each grain is divided into 100,000;000,000;000,000;000,000;000,000;000,000;000,000;000,000;000,000;000,000 parts, so that a single grain of any substance, in the thirtieth dilution, would extend between the earth and the sun 1,262;626,262;626,262;626,262;626,262;626,262;626,262 separate times."

But let us refer to another illustration: we often hear of the wonderful effects of the 10,000,000th part of a grain of sulphur. Now we all well know that ten thousand times this amount of sulphur passes into the stomach from the mouth with every pea, with every morsel of bread, with every drachm of saliva we swallow. The utter absurdity of the assertion of effects at all from very minute doses of sulphur may be judged from the fact, that the bile, amounting, according to a moderate estimate, to 12 ounces daily, contains upwards of 4 per cent. of sulphur, that is, there is employed in the function of one organ, no less than 240 grains of this elementary body, daily.

Nor can any support for homœopathy be derived from the minute portions of other elementary substances found in the blood or tissues, and the curious functions they there subserve. As for instance, the influence of fluorine in modifying the properties of the earthy phosphates, inasmuch as, extremely minute as the quantities of these elements may be, they exceed by a thousand, nay, by a million times, the pretended doses of the compound vegetable matters given by homœopathsists.

That such a person as Hahnemann should have numberless followers and advocates, might be well expected. Success in true science and legitimate practice involves labour, patience, integrity, and some talent. To conjure is easier than to study; wonders are more acceptable to the public than simple truths. The meanest intellect can grasp a bold error, and the limits of the true and false once passed, men fall into an abyss whence there is no redemption; they become first *dupes*, and then, finding it profitable, *impostors*. Hence, Homœopaths, Mormonites, Mesmerists, Southcoteites, and the whole tribe of quacks.

THE COLLEGES AND THE BILL.

WE know not what plausible opposition can be made by the two Colleges, to a measure so reasonable and so just to the great body of their brethren in general practice, but to whom they will give neither rights, nor representative privileges, nor protection. We must, indeed, award our humble meed of praise to the College of Physicians, for having, at least, acted with fairness, consistency, and a degree of generosity. If they have refused to admit gentlemen in general practice into their body, or to grant them privileges, they have not, at any of the recent conferences held at their College, opposed the great claims of the General Practitioners to a College of their own.

In this they have acted fairly and consistently; and we consider that they have also acted with generosity, in not laying any exclusive claim to the examinations in any branch of medical science.

Contrast this with the dog-in-the-manger conduct of the College of Surgeons, which ought to be held up to the reprobation of every honest man, and certainly of all men in general practice.

Let us examine the proceedings of this College a little more closely. They admit young men at the age of 21, after a very lax examination, to the membership of this body, for which a large fee is paid. For this the members receive no privileges, no rights, no protection, no share in the government of the College. The examinations are on two subjects, only, namely, anatomy and surgery, conducted *vis à voce*, at one sitting of generally less than one hour! The candidates are not examined in Medicine, in Chemistry, in Midwifery, Materia Medica, in Pharmacy, in Therapeutics, in Pathology, in Botany, in Medical Jurisprudence, nor in several other collateral sciences; and yet many, thus so partially and fractionally examined, think themselves fully entitled, and do forthwith practise the healing art in all its branches. We confidently ask, is a man who undergoes this fifth or sixth part of an examination, fit to be allowed to offer himself to the confidence of the public, as their medical adviser? And does this state of things require no reform?

We are quite aware that many of these young men may be, and numbers are, also examined at Apothecaries Hall, where the examinations are of a more extensive and valuable nature; but even there several branches are omitted which ought to be included, more especially Midwifery, Medical Jurisprudence, and always Surgery.

We know that there are nearly five hundred gentlemen practising generally in London, who hold no diploma but that of the London College of Surgeons, with its very insufficient

examination, and that there are upwards of eighteen hundred in the provinces in a similar predicament.

But the College of Surgeons in London arrogantly claim to be the sole examiners in Surgery in England and Wales, and on this pretended ground they opposed and finally broke faith with the National Institute at the conferences held at the College of Physicians.

Now, it is well known that the Universities of Oxford and Cambridge, and, we believe, the College of Physicians, have full power to examine in Surgery as a branch of Medicine. But we need go no farther back than the Charter of the University of London, which confers the right, not only to examine in Surgery for both their medical diplomas, but it entitles to conduct separate and *special* examinations in Surgery, with the power to grant a diploma accordingly. In fact, there are two public examinations in Surgery, with the power to grant a diploma accordingly. Away then with this futile argument of the College of Surgeons, and the unworthy and ungenerous opposition arising from it. We have said, and we repeat, that the conduct of the Council of the College of Surgeons is of the true dog-in-the-manger kind: they will neither examine their members so as to test their qualification for the duties of General Practitioners, nor will they allow others to do so, who are fully and amply qualified and willing to undertake the task.

The Council of the College officially admit the important fact, "*that the great majority of their members are less engaged in the practice of Surgery than in that of Medicine, Midwifery, and Pharmacy,*" and yet, with a dangerous inconsistency, they refuse to test their qualifications in these latter branches, which so much more frequently involve the health and lives of the community than a knowledge of Surgery merely.

We verily believe, that one reason why the Council for the time being have refused to examine their candidates for membership, in all the branches of medical science, as is done in the Colleges of Surgeons in Edinburgh and Dublin, is their total incompetency for such a duty. Were the present Examiners of the London College of Surgeons to be examined at the University of London for the degree of Bachelor of Medicine, or at the Society of Apothecaries for their license, we doubt whether even one out of the twelve would appear in the pass-lists! Indeed, the Council, in their published correspondence with the government, at once admit their own unfitness, by their anxious desire that the College of Physicians should undertake to examine the General Practitioners in Medicine, Midwifery, and Pharmacy. Nay, their anxiety on this point was so great, that they conferred with the other College for this purpose, and the College of Physicians at once acceded to the proposal.

From the jealousy which the Colleges have always shown of the more extended education and higher qualifications of the General Practitioners; from their opposition to the passing of the Apothecaries' Act of 1815, and the recent proceedings of the College of Surgeons; we confess that we should strenuously oppose any plan that would place the education or examination of our body under their control. We would much rather remain as we are under the Act of 1815.

This naturally leads us to eulogize the conduct of the Society of Apothecaries. Not only have they carried out their Act so as immensely to advance the qualifications of their

Licentiatees, and thereby have greatly raised their own class in the estimation of the public, but they have also acted most beneficially on the whole profession, by stimulating the Colleges and Universities to adopt much higher tests for their members.

They are, however, not unmindful that their powers were forced upon them, not a little to the disappointment of those who were most active in procuring those powers: that their Act was far from being what was even then desirable or necessary, and that many alterations are now requisite from the altered state of the profession.

They feel that their mission is fulfilled, and that, by their exertions, a constituency has been created, both willing and able to undertake those powers and duties which will be created by the Bill now before Parliament.

They have, therefore, pledged themselves to resign their present functions, so soon as a measure can be obtained which shall be more for the benefit of the General Practitioners of this country; and we have no doubt they will give all the assistance in their power for so noble and laudable an object.

THE GENERAL PRACTITIONERS' BILL.

In our last number we urged upon our medical brethren the importance and necessity of an immediate communication with their parliamentary representatives. This was for the twofold purpose of first, explaining the nature and principles of the Bill committed to the charge of Mr. WYLD, and secondly, to request them on public grounds and for the

public benefit, as well as in justice to the great body of surgeons in general practice, and who exercise their skill in every department of their profession, to give the measure their cordial support.

We trust that what we then said, and what we now reiterate, will rouse gentlemen in general practice to exert themselves to the very uttermost to command the attention and the support of their representatives in the legislature, in favour of a Bill which every one, who practises medicine, surgery, and midwifery, should consider as *his own Bill*.

We would respectfully but earnestly recommend, that those who can readily meet in cities, towns, and large villages, should do so at once, and send their united recommendations in favour of the measure. But those who reside in detached and smaller localities, might with great propriety and effect address their members individually on a subject in which they are so strongly interested. Even he who is most extensively engaged in country practice, and who has not conveniently the time nor opportunity to meet his neighbours, may perform this public duty by a short letter to the representative of his country or borough, as the case may be.

There is another duty which ought also to be immediately performed in addition to, or rather in conjunction with, the foregoing; and that is, to PETITION PARLIAMENT in favour of Mr. WYLD's Bill. Let our friends only show the legislature and the government that they are in earnest by sending petitions from every city, town, and village in the kingdom; and, in spite of opposition from the Colleges, or from others interested, we fear not the result.

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

(Extracted from the 'Paper of Transactions,' dated July, 1845.)

Continued from page 6.

Haeslop, R., Warwick square, Kensington
Haffenden, T., Hanwell
Haines, G. C., Stroud House, Godalming
Haines, W. F., Harefield Park, Uxbridge
Haines, R., Godalming
Haines, —, Copford, near Colchester, Essex
Haines, W. H. B., 12, King William street, Strand
Haines, R. L., Holloway
Hainworth, J., Lincoln
Hainworth, C., Crediton, Devon
Haldenby, W., Redness, Goole, Yorkshire
Hales, J., Holt, Norfolk
Halford, Edward, Hammersmith
Halford, E., 1, City road, Finsbury square
Halkyard, H., Certifying Surgeon under the Factory Act
Hall, E. S., Haworth, Yorkshire
Hall, J. C., Retford, Notts
Hall, C. R., Holmes Chapel, Cheshire
Hall, E., Dalton-in-Furness, Lancashire
Hall, W., Tottenham
Hall, W., Chesterfield, Derby
Hall, J., Congleton, Cheshire
Hall, M., Wortley, Leeds
Hall, J. P., 19, Rowland's row, Stepney green
Hall, J., 23, Paul street, Finsbury
Hall, Thomas, 11, Henry street, St. Luke's
Hallam, W., Newcastle-under-Lyme
Hallett, W., Chidick, Bridport
Halley, Alexander, 7, Albany street, Regent's park
Hallows, J. S., Great Cross Hall street, Liverpool

Hallsworth, S. M., Manchester
Hamilton, W., Ipswich
Hamilton, R., Derby
Hamilton, A., Amphill, Beds
Hamilton, H., Langharne, Carmarthen
Hamilton, Wm. Thos., Birkenhead
Hamilton, John Fintona, Omagh, Ireland
Hammerton, T., 111, Piccadilly
Hammond, S. M., Brixton
Hammond, Arthur, Sydenham, Kent
Hammond, Thomas, Brixton
Hampton, G., Reigate, Surrey
Hancock, J., Widmore W. Cross, Somerset
Hancox, W. M., Bilston, Stafford
Handey, James, Upper Stamford street
Handey, Horatio Henry, Upper Stamford st.
Hands, B., Hornsey
Handsley, S. T., Alford
Hanham, F., Bath
Hannah, W., Clarence street, Liverpool
Hansom, C. J., Bristol
Hansom, R. C., Bristol
Harcourt, R., Weybridge
Harcourt, G., Chertsey
Harday, G., Guilsboro', Northamptonshire
Hardern, W. T., J. Jackson's, Macclesfield
Harding, H., Leicester, House Surgeon to the Infirmary
Harding, J. N., South Molton, Devon
Harding, J. F., 13, Spencer street, Northampton square
Harding, W., 4, Percy street
Hardman, James, Todmorden, Lancashire
Hardon, W. T., 19, Grafton street East, Tottenham Court road

Hardwick, A., 28, Lower Phillimore place, Kensington
Hardy, R. F., Hull
Hargraves, J., Tunbridge Wells
Hargreaves, G., Walton, Norfolk
Hargreaves, J., Walton, Norfolk
Harold, E., Tunbridge Wells
Harper, A., Darlington, Yorkshire
Harper, R., 2, Conduit street, Hyde Park
Harrhy, J., Newport, Monmouth
Harris, Thomas, Wardington
Harris, C. M., Moreton Valence, near Dursley, Gloucester
Harris, J. P., Russel street, Liverpool
Harris, W., Worthing
Harris, H., Redruth, Cornwall
Harris, C., 13, Fenchurch street
Harris, S., 13, Fenchurch street
Harris, W. E., 13, Fenchurch street
Harris, M., Paradise place, Hackney
Harris, C., 74, Guilford street
Harris, H. C., 1, Windsor place, City road
Harris, W., 1, New Dorset place, Clapham road
Harrison, Isaac, Reading
Harrison, J. S., Braintree, Essex
Harrison, J. G., Sunderland
Harrison, P., Diss, Norfolk
Harrison, James, Preston, Lancashire
Harrison, J., Braintree, Essex
Harsat, W., Reepham, Norfolk
Harston, A. D., Liverpool
Harston, A. D., 22, Trinidad place, Islington
Hart, W. B., 15, Union street, Spitalfields

- Hart, W., North Shields
Hart, W., Dorking, Surrey
Hartland, W. B., Chobham
Hartnell, J. Henry, Clifton Hotwells
Hartwell, E., Bedworth, near Coventry
Harvey, R. S., Lincoln
Harvey, W., 48, Lonsdale square, Islington
Haslehurst, T., Bridgenorth
Hastings, H. C., East Dereham, Norfolk
Hastings, R., Chester
Hatfield, E., Stamford, Lincoln
Hatfield, J. R., Wibsey, near Birstal, Yorkshire
Hatfull, R., 23, Union street, Deptford
Hatton, John, Coleford, Gloucester
Hattton, J., Chorton-on-Medlock, Manchester, Surgeon to the Chorlton-upon-Medlock Dispensary
Haviland, E. S., 77, Prospect place, Maida hill
Hawkins, J., 36, Colet place, Commercial road East
Hawkins, J., 10, St. James's place, Old Kent Road
Hawkins, J. V., 63, George st., Portman sq.
Hawkins, J., Newport, Monmouth
Hawkins, T., Bristol
Hawkins, J., Newport, Monmouth
Hawksley, Thomas, Nottingham
Hawksley, T., 57, Margaret street, Cavendish square
Hawthorn, J. W., 2, High street, Hoxton Old Town
Hawthorn, A., Eccleshall
Hawthorn, C., Eccleshall
Hay, W., Leeds, Surgeon to the Eye Infirmary
Hay, R. C., Leeds
Hay, Alexander, Chesterfield st., Liverpool
Hay, J., 2, Newgate street
Haydon, H. P., Diss, Norfolk
Hayes, Samuel, G., 1, Union place, Commercial road East.
Hayland, T., Metheringham.
Hayland, Wm., Dunham, Nottinghamshire
Hayles, G., Alresford, Hants
Hayman, C., Axminster
Hayman, P. C., Axminster
Hayward, H., Aylesbury, Surgeon to the Bucks Infirmary
Hayward, G. B., Stow, Gloucester
Headland, E., 32, Guildford st., Russell sq.
Heald, F., 33, College street, Camden town
Heale, A., Luton, Beds.
Heath, G. T., 63, Hoxton Old Town
Heath, J., Farnworth, near Liverpool
Heazlewood, Oliver, Ropsley, Lincoln
Hebblethwaite, Thornton, near Bradford, Yorkshire
Hedley, G. D., Bedford
Hedley, J. H., Gateshead
Hedley, Nicholas, Felton, Northumberland
Heeley, J., Stone, Stafford
Heelis, R., 28, Three Colt st., Limehouse
Heirn, C. H., Barnstaple, Devon
Hele, H., Ashburton, Devon.
Hellard, G. B., Portsmouth
Helsham, A., Constable row, Mile End rd.
Hembrough, J., Waltham, Lincoln
Hemming, W. B., Saxmundham, Suffolk
Hemming, J., Kimbolton, Hunts
Hemingway, H., Dewsbury, York
Hemsey, W., Kegworth, Leicester
Henderson, F. A., 13, Portman place, Maida hill
Henry, A., 12, Wapping wall
Henry, J. G., 28, Sidney place, Commercial road
Hentch, W., 23, Lowrie terrace, Westminster road
Henwick, R.,
Hepworth, W., Morley, near Dewsbury, York
Hepworth, J., Croft's bank, Stretford, Lancashire
Herbert, C. J., Bedworth, Warwick
Herepath, W. B., Bristol
Herman, — Curry, near Langport
Herring, W., 74, Sun street, Bishopsgate
Hesslewood, R., 1, Jubilee st., Mile End rd.
Hesslegrave, Joseph, Marsden, near L'pool.
Hewer, J., Chobham
Hewett, E. W.
Hewett, J. D., 12, Michael's pl., Brompton
Hewlett, H., Harrow
Heyward, G. P., Egham
Heywood, R., Manchester
Hickman, Charles, 7, Grosvenor place, Camberwell
Hicks, J., Newington
Hicks, E. J., Havant, Hants
Hicks, J. Midhurst, Sussex
Hickler, W., Deal
Hickman, George, Marlow, Bucks
Hickson, John, Bradford, York
Higginbottom, J., Nottingham
Higgins, E., Clifton
Higgins, C. H., Taunton, Surgeon to the Taunton and Somerset Hospital
Hightett, J., 14, South side, City-road
Hightett C., Bristol
Highton, H., Leicester
Hilbers, G. J., 12, Foxley road, Kennington
Hill, J., 8, John street, Minories
Hill, E. H., Richmond, Surrey
Hill, R. G., Lincoln
Hillawell, —, Huddersfield
Hilles, M. W., 6, Upper Ranelagh street, Pimlico
Hillier, H. B. C., 85, Gower street
Hilliard, G. R., Rayleigh, Essex
Hills, Robert, City terrace, City road
Hillier, H., Sheffield
Hilton, H., Liverpool
Hilton, J. B., Swinton, Manchester
Hislop, T., 8, High street, Stepney
Hitch, H. R., Fulbourne, Cambridgeshire
Hitch, R. R., Fulbourne, Cambridgeshire
Hitch, F. R., Fulbourne, Cambridgeshire
Hitchings, T., Seal, near Sevenoaks
Hitchman, W., North Leach
Hoare, J., Seendis Melksham, Wilts
Hoare, —, Shoreham, Sussex
Hoblyn, Francis P., 13, Princes' road, Nottinghill
Hoblyn, W., Cambridge
Hobson, S., Hastings
Hobson, N. G., 5, Great Marylebone street
Hockly, W., 7, Winckworth place, City road
Hodding, W. H., 67, Gloucester place
Hodge, B. T., Sidmouth
Hodges, T., 104, Guildford street, Russell square
Hodgson, J., Carlisle
Hodgson, J., 1, Spital square
Hodgson, R., Clapham, near Settle, Yorks
Hodgson, W. Anably, Yorks
Hodgson, W., jun., Anably, Yorks
Hodgkinson, F., Newark upon Trent
Hodson, L., Great Nelson street, Liverpool
Hodson, Thomas, Earle street, Lancashire
Hodson, —, Park road, Toxteth park, Liverpool
Hoffman, G., jun., Margate
Hoffmeister, W. C., Cowes, Isle of Wight
Hogg, C., 14, Finsbury place, south
Holbrow, A., Stonehouse
Holderness, W. B., Windsor
Holding, C., 13, New Bridge street, Blackfriars
Holdworth, W., Ripley, Yorks
Holland, P. H., Manchester
Holland, J., Chesterfield
Holland, Edward Charles, Honiton
Hollis, W. H., Yarmouth, Isle of Wight
Hollister, G., Newent
Holman, H. M., Hurstpierpoint, Sussex
Holman, H., Reigate, Surrey
Holman, H. B., Crediton, Devon
Holman, A., 10, John street, Minories
Holman, W. H., jun., 10, John street, Minories
Holme, W., Bowness, Westmoreland
Holme, James John, Linton, Cambridge
Holmes, S., Bradford, Yorks
Holmes, J., Fulham
Holmstead, G. C., Bocking, Essex
Holroyd, J., Halifax
Holt, J., Leighton Buzzard, Beds
Holt, William, Greengate, Salford, Manchester
Holt, B. W., 30, Abingdon street, Westminster
Holt, H. F., 67, Grosvenor terrace, Horseferry road
Holtum, C., Canterbury
Homsted, F. R., Whitechurch
Hood, George Y., Westgate street, New-castle-on-Tyne
Hood, Robert, Morpeth, Northumberland
Hood, P., 15, Lower Seymour street
Hooper, R. L., 6, London road, Southwark
Hooper, E. V., 82, Brunswick street, Hackney road
Hooper, W., Southampton street, Camberwell
Hooper, Richard, Wotton Bassett, Wilts.
Hooper, G., Wotton Bassett, Wilts.
Hooper, G. E., Yeovil, Somerset
Hopgood, J., Southernhay, Exeter
Hore, H. A., Bristol, Apothecary to the Bristol Infirmary.
Horn, T., Dispensary, Birkenhead
Hornby, T., Tuxford, Notts.
Hornell, James, (M.D.), Bradford, Yorks
Horsfall, J., Wakefield
Horton, F. W., Hammersmith
Horton, J., 8, High street, Stepney
Horne, J. H., Princes street
Horwood, J., Northampton
Houghton, J. R., 2, Earle street, Blackfriars
Houghton, Edward, Ormskirk, Liverpool
Houghton, E., Lytham, near Preston
Houghton, J. N., Dudley, Worcestershire
Houghton, E., Ormskirk
Hounsell, John, Bridport
Hovell, D. B., Five houses, Clapton
Howard, R.
Howard, R., 6, Upper Gloucester street, Dorset square
Howard, J. W., Leeds
Howard, W. H., Glossop, Derby
Howard, F., Halesworth, Suffolk
Howard, H., New Buckenham, Norfolk
Howard, F. C., Linton, Cambridge
Howard, —, Tenterden, Kent
Howell, John, Solva, Pembroke
Howell, T., Prince's Risboro', Bucks
Howell, J., Wandsworth
Howell, C. W. H., Stratford
Howell, C. H., Stratford, Essex
Howell, J., 8, Bridge street, Southwark
Howey, W., 5, Great Queen street, Lincoln's Inn
Howey, W., 5, Great Queen street, Lincoln's-inn-fields
Howey, E. W., Bromyard, Hereford

(To be continued.)

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CXIX.—CASE OF HYDROPHOBIA. BY JAMES STRUTHERS, M.D., Leith.—John Weston, æt. 8½, was bitten, on the 13th October, 1850, in the right eyebrow, by a middle-sized dog. The animal was supposed to be mad, and was immediately killed. I saw the boy within an hour and a half after the accident. There were two wounds, one above the eyebrow, an inch in length, and lacerated; the other immediately below the eyebrow, half an inch in length, and with a clean margin. Hæmorrhage had ceased for some time, and the parts had been carefully washed.

There being reason to believe that the dog was mad at the time of the accident, I resolved to destroy the bitten parts as speedily as possible. The patient, being much frightened and very unruly, was put under the influence of chloroform, without which it would have been impossible to have cauterised the parts satisfactorily, and without risk of injuring the eye. The two wounds were laid into one, the lacerated parts excised, and the whole of the raw surface carefully cauterised, first with the nitrate of silver, and then with the pernitrate of mercury; while the latter was being applied, one of the branches of the supra-orbital artery bled freely, and required a ligature.

The wound went on satisfactorily, and presented, at the end of the third week, a healthy cicatrix, with scarcely any deformity.

Nothing unusual had been observed in the behaviour of the dog previous to the day of the accident. In the morning he was noticed to be dull and restless, but took some food, and was observed once or twice in the course of the day lapping water in the usual way. In the afternoon he was observed rolling on the grass as if in agony, uttering at the same time a kind of suppressed bark or howl. It was at this time that the boy approached to caress him, when he sprang up and bit him in the eyebrow. Shortly before this the owner of the animal had given him some water containing nitre, which seemed to choke him, and caused vomiting.

The dog having been killed immediately after the accident, I was prevented from making any observations on his condition. There was nothing unusual, however, in the appearance of the body. The mouth contained some blood, but was free from froth, or fluid of any kind. On the following day I made a *post-mortem* examination of the body of the dog. The mouth, tongue, and pharynx, presented nothing abnormal. The trachea and larynx were nearly filled by a rather firm clot of dark blood, which, as it did not extend into the bronchi, was supposed to have been extravasated at the time the animal was killed. The mucous membrane of the trachea and bronchi was much redder than natural; and there was some frothy fluid in the bronchi. The lungs contained much dark blood, and presented several spots of ecchymosis on their surface. The heart was normal, and the large veins near it were distended with dark blood. The œsophagus was natural. The stomach was the size of an orange, contained some air, and about three ounces of a dirty greenish-coloured fluid, in which were two blades of grass, and some dirty stringy mucus. The other abdominal viscera were normal; the bladder strongly contracted, and quite empty.

On the 15th November, thirty-two days after the accident, I was called at two in the morning to see the boy, who, I was informed, had been complaining for about two days. I found him sitting in bed in his father's arms. He was restless and fidgety, never keeping the same posture for a minute at a time. His look was quite peculiar, and expressive of profound dread. His eyes were full and clear, and much more intelligent looking than usual. On being asked what was the matter, he said he felt pain in the wound, in the eye, and all over the same side of the head. The cicatrix was pale and natural in appearance. He answered questions rationally, and without any appearance of fear; put out his tongue when desired to do so; and gave me his hand to feel his pulse, which was 112, rather weak, and remarkably irregular. While holding his hand I blew suddenly on his face, when he sprang, convulsed, to the other end of the bed, covered himself with the clothes, shook, and cried very much; and besought me not to breathe upon him any more. This established the diagnosis.

I then learned the following facts—namely, that he had continued quite well up to the 13th November, his friends taking care not to irritate him in any way, or to make any allusion to the dog. On the evening of the 13th, exactly a month after he had been bitten, he and some of his companions were out amusing themselves, when they were frightened by some one playing the

ghost, and ran home. He refused to go out again, saying he was frightened. Immediately after this, on the ghost being mentioned, he began screaming and crying, complained of pain in the wound, in the eye, head, back, legs, and arms. He maintained also that his little fingers were bent and stiff, although his parents could not observe anything unusual. When anyone happened to breathe upon him, he told them he did not like it, and to keep away from him. The same evening he took his supper, consisting of porridge and milk, in his usual manner, and without making any complaint. He slept but little during the night, was restless, and tossed about a good deal. Next morning he had some coffee for breakfast, but took only one mouthful, saying it would not go down. He tried water and milk, but with the same result. In the afternoon he ate a little biscuit, and took some milk, which he swallowed without difficulty. In the evening he asked for a potato, snatched it from his sister, took a bite of it hurriedly, and then pushed it away. He was restless during this, the second evening, and became more so towards morning, when I saw him for the first time since the seizure.

His state then was as formerly described. When asked if he would have some water or milk, he refused at first, but afterwards offered to take either. He put a cupful of milk to his mouth, but immediately pushed it away in an agitated manner, and buried himself in the bed-clothes. He was then offered some jelly, of which he readily took two or three spoonfuls, but in an agitated manner, and as if in a great hurry. He then had a bit of soft biscuit, which he ate calmly; when swallowing it he was ordered to hold up his head, when the act of deglutition was observed to be performed deliberately, and without any spasm or hurry. When asked if he had pain in the throat, he said "Yes," and pointed to the larynx. The tongue was clean, steady and moist; there was no unusual amount of fluid in the mouth, and nothing like slaver on the lips. The breathing was calm, regular, and without noise. He was desired to get out of bed and to walk to the fire, which he did barefoot, on the cold floor, and without any agitation, and commenced warming himself. He was then offered a cup of cold water, of which he readily took a mouthful, but instantly drove away the cup, and ran into a corner, seemingly suffering from pain and spasm in the throat. The water was then warmed to blood-heat, when, after some pressing, he took another mouthful, which affected him in a similar manner, but not so severely. The temperature of the surface was natural, and there was no sensible perspiration. He could bear the legs, arms, and trunk to be handled and breathed upon without showing any uneasiness, but not so the face. He could also bear the head and spine to be tapped strongly, complaining only of slight tenderness from the head down to the middle of the back. A bright light presented suddenly caused slight agitation, but was soon borne with ease. The pupils were moderately dilated, and acted readily and equally. On being asked if he was afraid of anything, he hesitated, and would not answer me, but whispered to his mother that he was afraid of the ghost; and on being again asked, he told his father that he was afraid of the dog. He was now ordered ʒii. tincture of cannabis, with ʒij. of laudanum, of which he was to have half a teaspoonful every half hour.

At 8 A.M. his condition was much the same; he ate some biscuit and drank some milk during my visit.

At 3 P.M. he was much worse. He could not remain quiet for a single instant. There was great general agitation, with constant spasmodic movement and jerking of the limbs; and every two or three minutes there occurred a fit of general convulsions, commencing about the throat, during which the countenance was distorted, and had a wild and savage expression. These fits occurred sometimes without any apparent cause, but were most frequently induced by his attempting to take anything in his hands, or attempting to swallow, or when he was breathed upon. There was now a profuse flow of frothy fluid from the mouth, accompanied by constant hawking, and spasmodic working of the pharynx, with occasional retching and frequent belching of wind. The fluid was partly spat out and partly ran over the lips, whence it was constantly wiped away by the patient. He frequently asked for water, milk, and meat, and did not seem to have any dread of fluids except when he was pressed to take them, or when he attempted to swallow them. When offered any fluid in a cup, he would not take it, but would ask for a spoon, dip it into the cup, hold it for some time in front of him, make repeated and convulsive efforts to bring it to the mouth; then, with a look of great resolution, dash the spoon into the mouth, and throw it away. This was invariably followed by frightful convulsions of the whole body, which generally terminated by the belching of large quantities of wind. Once or twice he had spasmodic rigidity of the arms and hands, more especially of the right, and complained much of

* The gramme equals about 15½ grains.—Ed.

pain in the little fingers, experiencing great relief when they were squeezed. He was perfectly sensible, knew and named those around him, and answered questions rationally, but generally in monosyllables, and spasmodically, owing to the severity of the convulsions. He never showed the least inclination to bite or to hurt those around him. There seemed to be constant change of purpose and of thought. The senses of hearing, sight, and smell, were preternaturally acute, though he once or twice said he could not see. It was impossible to deceive him in any way.

At half-past 6 p.m., Dr. Christison saw him with me. He was then weaker, and presented the same symptoms as in the afternoon, but in a less marked degree. The pulse was scarcely perceptible. He ate a piece of biscuit and took a mouthful of tea, which was followed by severe convulsive efforts to swallow, and by convulsions of the whole body. He was ordered to have a suppository, containing half a grain of the muriate of morphia, to be followed in half an hour by another containing a whole grain.

At half-past 8 p.m., he was much weaker; had become a little quieter after the second suppository; and was said to have vomited some blood. He was seen at this time by Drs. Coldstream, Keiller, W. T. Gairdner, and J. A. Sidey. The pulse was all but gone at the wrist; he still had fits of convulsions, but much less severe than during the day. He was evidently sinking fast. He continued much in the same state till half-past nine p.m., when he expired calmly, having been nearly free from convulsions for the last quarter of an hour, and apparently quite sensible. Death took place thirty-three days after the accident, and fifty hours after the first symptoms had shown themselves.

Section Cadaveris.—The body was examined thirty-six hours after death, by Dr. W. T. Gairdner and Mr. John Struthers, in presence of Dr. Keiller and myself.

External Appearances.—There was slight lividity of the general surface; and the posterior part of the body presented the usual post-mortem discoloration. There was a copious escape of whitish foam from the mouth and nose, that from the latter was slightly reddened. The *rigor mortis* was almost absent, except in the fingers and legs, where it was slight. The cicatrix on the right eyebrow was healthy in appearance. The eyes were clear and lustrous, the pupils moderately dilated, the left one oval and larger than the right.

Head.—Integuments rather exsanguine; superficial vessels of brain moderately congested. About half a drachm of clear fluid in each lateral ventricle, and very little at the base of the brain; the membranes healthy. The cerebral substance, both white and gray, very slightly and uniformly softer than usual. The vertebral and basilar arteries had a dark greenish appearance. The superficial vessels of the cerebellum and medulla oblongata were generally and pretty fully congested; the gray matter of the cerebellum rather deeper in colour than natural.

The cranial nerves were carefully examined, more especially the pneumogastric, both where it leaves the medulla oblongata, and at its place of origin in the floor of the fourth ventricle, but without detecting anything unusual.

Spinal Cord.—The dura mater normal. The pia mater in the dorsal and lumbar regions more congested than in the cervical, but not more so than usual. The same slight general softness which was observed in the brain existed in the cord, but to a less extent, more especially at its upper part. The medulla oblongata was normal, and firmer than any part of the cord.

Chest.—A considerable quantity of blood had escaped from the body when the head was examined, and before opening the thorax. There was no fluid in the pleuræ. Both lungs presented at the posterior part a few spots of sub-pleural ecchymosis, and at the lower and anterior borders a few ridges of interlobular emphysema. Numerous lobules were observed of a darker colour than the others, well defined, and depressed slightly below the general surface. About two drachms of clear fluid were found in the pericardium. The visceral pericardium presented several small spots of ecchymosis. The right ventricle and auricle contained two or three half decolorised clots, and a considerable quantity of frothy fluid blood. The left ventricle and auricle were well contracted, and contained a little blood, but not the slightest froth.

The *tongue*, *pharynx*, and *œsophagus* were perfectly natural, the mucous membrane presenting its usual pale colour. The aryteno-epiglottidean folds, and the mucous membrane for half an inch below them, posteriorly, were of a faint rose-red colour, but not deeper than natural.

The *sublingual glands* were natural; the other salivary glands were not examined.

The *trachea* was coated throughout with a sanguinolent froth. The mucous membrane of the epiglottis and larynx was natural; that of the trachea was of a rosy hue, and minutely injected, the

redness commencing about half an inch below the cricoid cartilage, and becoming deeper towards the bronchi. The bronchi contained much frothy mucus; their mucous membrane was of a deeper red than that of the trachea. The pneumogastric nerve was carefully examined on both sides of the neck, and was found perfectly natural.

Abdomen.—The stomach contained about half a pint of dirty greenish coloured fluid. The mucous membrane in the posterior surface presented a considerable amount of finely arborescent injection, with some ecchymosis. The other abdominal viscera presented nothing unusual.—*Monthly Journal of Medical Science, January, 1851.*

CXX.—REMARKABLE CASE OF MENSTRUATION OCCURRING IN A CHILD THREE YEARS OLD.—*Désirée-Clémentine A—*, of Saint Vincent-la-Rivière, section de Broglie (Eure), a strong, well-formed child, aged 34 months, fair, of a lymphatic-sanguineous temperament, and inclined to embonpoint. For a country child, her intelligence is remarkable; her breasts are developed, although the external sexual organs present nothing extraordinary either in development or conformation. For some weeks after her birth her survival was doubtful; but at four months old her health appeared established. It was at the age of 34 months, that, after symptoms in every respect similar to those which women about to menstruate experience, the uterine discharge commenced, which is the subject of this communication. The discharge on the first day was rather slight, but increased on the second and third days, and ceased on the fourth. The quantity of blood was estimated by the village matrons, as equal to that of a woman of full age.

The mother, terrified at the strange phenomenon, hurried to an apothecary of Broglie, demanding medicines to stop the hæmorrhage. This the conscientious apothecary, M. Blard, refused, advising her to consult a physician. The mother, re-assured by the opinion of the apothecary, and the cessation of the discharge, thought no more of the circumstance, until the 15th of the following month, when the little Clémentine became morose and quarrelsome, was seized with pains in the abdomen, accompanied with fever, thirst, loss of appetite, and sleeplessness, and in twenty-four hours the hæmorrhagic fluxion re-appeared from the vagina.

For four consecutive months the discharge was re-produced with the same periodical regularity, always announced by the same precursory symptoms, and accompanied with the same incidents, viz., hypogastric tension, head ache, and twitching of the tendons. These sufferings were much alleviated by the application of topical emollients to the abdomen; when the flux ceased everything was restored to its normal condition. This uterine loss, however, began to alter its course and nature. Thus, it returned with less regularity at longer intervals; the blood lost its density, became pale, and at last assumed the character of leucorrhœa. Finally the leucorrhœa also disappeared, having shown itself for the last time towards the end of July last. The child at first appeared to experience no ill effects from the sudden suppression until lately, when the signs which formerly announced the return of the discharge have re-appeared.—*L'Union Médicale, Dec., 1850.*

CXXI.—TREATMENT OF IMPETIGO BY PURGATIVES AND TOPICAL ASTRINGENTS. By M. CAZENAVE.—In a case of impetigo, in a lymphatic subject, remarkable on account of the excessive suppuration, M. Cazenave has produced a rather rapid cure, by the employment of purgatives on the one hand, which he uses in nearly every case of impetigo, and topical astringents, which are rather prejudicial than useful in ordinary cases, but which M. Cazenave has found most successful in lymphatic subjects, among whom occur remarkable examples of impetigo, accompanied with excessive suppuration. The two prescriptions employed by M. Cazenave are as follow:—Infusion of red roses, 200 grammes; sulphate of zinc, 60 centigrammes; laudanum, 2 grammes; wipe gently after each application, and powder with a little dry starch. After this application, and gentle purgatives, the eruption still resisted for some days the employment of cataplasms and mild laxatives, but at last yielded to the use of the following lotion:—Infusion of red roses, 500 grammes; tannin, 3 grammes.—*L'Union Médicale.*

CXXII.—ON THE EMPLOYMENT OF THE VAPOUR OF IODINE IN THE TREATMENT OF PULMONARY PHTHISIS.—M. Chartroule read on this subject a paper, from which he drew the following conclusions:—

1. The employment of iodine, administered in different forms, may be of great use in the cure of tubercles in general, and es-

pecially in tubercles of the lungs. It produces no inconvenience.

2. Its extreme volatility renders its use exceedingly easy in affections of the lungs.

3. The use of iodine in vapour does not exclude that of the tincture in friction, and of iodide of potassium internally.

4. We may use with advantage, both the preparations of iodine, and cigarettes containing a certain proportion of this substance.

5. The employment of iodine is preferable to that of cod-liver oil, the taste of the latter being detestable, and less efficacious than iodine itself, to which it seems to owe its curative properties.

6. The use of iodine in no way interferes with the curative regime—the respiration of hot and dry air, in short, all the other means considered desirable to prescribe for consumptive patients.

—*Nouvelle Encyclographie des Sciences Médicales.*

CXXIII.—CASE OF EJECTION OF A BEAN FROM THE AIR PASSAGES AFTER REMAINING SIX DAYS. EXCERPTA.—Antonio Tomas Alvarez, 5 years old, of sanguine constitution, and enjoying good health, was on the 11th July last attacked with so severe a cough that he was thought in danger of asphyxia. Don Manuel Camacho was sent for, but could not see the child till half-past nine o'clock, p.m. In the interval M. Garcia Ocana was called in, to whom they related that in the afternoon while the child was eating some beans, one of them stuck in his throat. From this time there was a sudden change in the voice and breathing, with the sensation, according to the little patient's assertion, of a body "rising and falling in his chest." At eight o'clock, p.m., severe paroxysms; the face bloated; suffocating cough; stertorous breathing; very great alteration in the voice; the eyes and superficial veins of the neck distended; convulsive movements; the pulse hard and irregular (102); the warmth of the body unequal; partial sweat on the face, neck and chest; very great uneasiness. When the child was asked where he felt the pain, he placed his left hand on the trachea, between the larynx and the sternum.

It was thought, with good reason, that there existed some foreign substance in the trachea. The contact of this substance situated, no doubt, near the glottis, produced the symptoms already mentioned. Emetics were employed, with expectorant and sternutatory remedies, as recommended in similar cases; and, in short, they decided on an operation, to which the parents unwillingly consented. To secure as much as possible their medical reputation, these two eminent men consulted M. Manuel Cuesta y Plana, who saw the patient the third day after the accident. They agreed to operate the next day, i.e., the fourth day, during which interval they observed a deceptive tranquillity in the child. The parents, deceived by his quiet appearance, thought him better and objected to the operation.

The fifth day no change. Two violent fits of coughing, of short duration, did not in any way alter the tranquillity of the child, notwithstanding the continuance of the altered voice, and difficulty in breathing.

In the evening of the sixth day, the patient was attacked with a very violent fit of coughing; the pulse weak and thready; partial cold sweats; convulsive movements; in the interval of the paroxysms in a drowsy state. But soon these alarming symptoms gave place to the most complete apyrexia, and, to the surprise of all, the child ejected from the mouth a bean six lines long and four broad. The little patient was found lying on his belly at the time.—*Boletín de Medicina Chirurgia y Farmacia.* November, 1848.

CXXIV.—CASE OF COMMINUTED FRACTURE OF THE OCCIPITAL BONE.—EXTRACTION OF THE SPLINTERS FIVE MONTHS AFTER THE INJURY. BY DR. BOCANMY.—Nicholas Matthie Vanprat, merchant sailor, aged 29, entered the hospital, Dec. 15, 1848. His constitution was good; temperament bilio-sanguineous. In the month of July, 1848, he had received a blow on the head from a pulley pointed with iron, of 12 pounds weight, falling from a height of about 10 yards. The patient declared he did not lose consciousness, but was only stunned for the moment; and those who witnessed the accident also bore testimony to the same effect. On the next day, however, he discovered a sanguineous tumour near the contusion; it was of moderate size and painful on pressure. The man did not discontinue his ordinary labour, although he experienced at times dull heavy pain in the part affected. Towards the month of November the tumour assumed the character of an abscess, and suppurated freely. He states that the pain then decreased. From this period Vanprat experienced nothing remarkable; but finding that the wound did not heal, he consulted M. Long, senior surgeon to the Civic Hospital of Toulon, who advised him to enter the hospital, which he did on the 15th December. The following are the notes made

on the day of his admission. There exists in the superior occipital region a circular opening of the integuments and of the bone, sufficiently large to show the pulsations of the brain. The edges of the opening slightly cedematous, are rather painful on pressure; a considerable quantity of normal pus flowing from the wound, especially on inclining the head backwards. Probing the wound occasions some pain; after penetrating to some depth, no fracture is observable; there are no pains in the head; all the functions are well performed.

The diagnosis was difficult. Was there necrosis of the bone? or fracture with or without splinters?

Without stopping to form an exact diagnosis, it was decided that free course should be given to the discharge, either by the operation of trepanning, or by the extraction of the splinters.

December 16th. A crucial incision was made across the whole extent of the injured part; the flaps were dissected back, and the vessels tied; a positive comminuted fracture was then seen, although not sinking deeply into the brain. The fragments were seized with strong pincers, and after their extraction, a quantity of thick pus issued from the opening made in the arch of the skull. A simple dressing was then applied, consisting of a piece of perforated linen, placed at the bottom of the wound, a layer of lint, a pad, and some folds of bandage.

In the evening the patient was in a favourable condition; he experienced slight pains about the wound, but no marked signs of fever.

17th. The patient suffered more intense pain; he had no rest during the night; head dull and heavy; pulse rapid. (Lemonade; mustard bath to the feet).

18th. Less pain in the head; pulse more moderate; no heat of skin; appearance of wound favourable; suppuration abundant. (Broth; mustard baths to feet, and lemonade).

19th. General condition changed; thirst; tongue covered in the centre with a white coating, and red at the edges; skin hot; pulse rapid; tension of the epigastrium; head-ache; suppuration less abundant than on the preceding evening. (Purgative lavement).

20th. General symptoms much the same; continued fever, agitation, want of sleep; scarcely any suppuration from the wound. (Emollient lavement).

21st. The state of the patient not ameliorated; appearance of erysipelas in the face; the scalp remaining unaffected. (Lemonade; mustard to the feet).

22nd. The face had become flushed and swollen, especially about the eye-lids; agitation; want of sleep. (Mercurial friction).

23rd. The erysipelas is decidedly confined to the face; swelling increases; wound in the same state; no relief from the bowels for two days. (Three mercurial frictions; seidlitz water).

24th. Same condition; three motions in the course of the day. (Broth; mercurial frictions).

25th. Diminution of tension and pain; general condition more satisfactory. (Broth; two mercurial frictions).

26th. Evident improvement; tumefaction diminished; appearance of wound more satisfactory; suppuration less abundant. (Broth; continuation of mercurial frictions).

27th. Desquamation begins in several places; mercurial frictions suspended. (Soup; lemonade).

28th. An abscess appears above the right malar bone; gradual improvement; return of appetite.

30th. Another sub-cutaneous abscess appears below the left inferior eyelid; the patient progresses favourably; the wound is granulating.

January 1st, 1849. The desquamation is entirely terminated; the cicatrization of the wound of the skull has commenced.

It is worthy of remark that in this case, there was the entire absence of symptoms of compression, which ought not, in our opinion, to be attributed to the remarkably slow work of irritation produced by the fragments of bone. Notwithstanding the tardiness of the process, the pus would infallibly have caused compression, if the tumour had not suppurated, and thereby hindered the accumulation of the morbid secretion on the membranes of the brain. The opening of the abscess may, therefore, be regarded as the cause of the absence of secondary compression. The proof of this may be adduced from the relief the patient experienced after the pus was able to escape freely. The abscess open, the dura mater is exposed to the contact of the air, and therefore, to causes of inflammation, and yet no unfavourable symptoms ensue. This fact proves that the opening of the arch of the skull was then much less dangerous than if it had been preceded by a pathological process which had changed the nature of the tissues.

Before concluding, a few remarks may be made on the erysipelas of the face. The seat of the erysipelas often gives birth to symptoms which may justly be termed *symptômes de voisinage*. Thus,

in erysipelas of the face, serious symptoms appear, which may be made to establish different hypotheses.

Thus, with the ancients it was metastasia. Other physicians maintain that the malady is communicated to the brain by continuous channels. Sympathy has also been regarded as a cause of the appearance of these phenomena. Be this as it may, it is remarkable that erysipelas, developing itself in the face of a subject, having already a wound in the head, and an opening of the arch of the skull, should yet be accompanied with no unfavourable symptoms, such as delirium, drowsiness, or convulsive movements. We offer no explanation of the fact, we confine ourselves to the statement.—*Gazette Médicale de Montpellier*. December 15, 1850.

CXXV.—CASE OF PARALYSIS OF THE RIGHT SIDE OF THE FACE, ACCOMPANIED WITH INCREASED SUSCEPTIBILITY OF HEARING. EXCERPTA.—Thévenin, a soldier of the line (25), was taken to the hospital of Gros-Cailien, 25th April, 1850, under the care of M. Larrey. This man was afflicted with an alveolar abscess, for which two teeth had been extracted before his entry into the hospital. Since which time, and without other obvious cause, complete paralysis of the right side of the face came on. The disease began suddenly; it existed some hours without the patient being conscious of it; his friends pointed it out to him. He neither felt uneasiness, nor cephalalgia, nor pain, except in the parotid region on the right side, which was sensible to the touch and a little swollen.

All the muscles of the right side of the face, to which the seventh pair of nerves furnish branches, were more or less affected; thus, the superciliary muscle and the anterior part of the occipito-frontal ceasing to close, it was remarked that the eyebrow was situated lower than that on the opposite side, and inclined towards the median line; the corresponding half of the forehead could not frown. The orbicular muscle of the eyelid being also paralysed, it could not counterbalance the elevator; thus he was unable to close the eye; the superior eyelid was lowered, and the inferior slightly turned outwards, from whence it follows that the secretory organs, especially of the inferior lid, being somewhat displaced, there existed epiphora. All the muscles which act upon the nose participated in the paralysis. The nostril on the right side was deprived of all movement, and could no longer dilate itself during inspiration. The upper lip on the right side was a little swollen, without being displaced. The tongue retained its form and normal direction; the right half of this organ lost the sense of taste, and the patient complained of coldness in this part.

One peculiarity to be noticed in this case is, the increased susceptibility of hearing, since the development of paralysis, the organs of hearing acquired very great acuteness, the patient perceived the least noise at a great distance.

Thévenin is of a sanguine temperament; he has never had any syphilitic affection; he was attacked a short time after his entering service, with spinal disease, for which he was bled at the Convent, at Lyons, and no traces remain.

Treatment: V. S., cupping, blisters, moxas to the back of the neck, leeches behind the ears, blisters to the temples, oily embrocations, gentle friction, &c.

The patient quitted the hospital of Gros-Cailien, all but cured. —*L'Union Médicale*, Dec. 1850.

CXXVI.—CASE OF NEURALGIA; WITH ACUTE SENSIBILITY OF THE SKIN OF THE WHOLE BODY, CURED BY TRANSCURRENT CAUTERISATION.—A young woman, 24 years of age, born at Bordeaux, of strong and regular constitution, and sanguineo-lymphatic temperament, was taken to the hospital, suffering from frequent and painful palpitation of the heart, with extreme sensibility of the skin beneath the left breast. When M. Costes was in attendance in the latter part of April, 1849, these symptoms were quite confirmed. Neither auscultation nor percussion could be practised without increasing the pain. Twenty leeches were applied under the left breast. A seton, which had been previously placed in this part, again suppurated. It had produced a slight amendment in the symptoms, although they were still intense. In about fifteen or twenty days the suppuration ceased. From this time the pains returned, and the palpitation of the heart became more frequent. Every day she had eight or ten fits of very painful palpitation, each lasting a quarter of an hour. There was dysmenorrhœa. Sedatives of all kinds were employed in vain. It was decided to apply eight leeches each time to the thighs. In the month of July there was aggravation of the symptoms. The patient appeared menaced with asphyxia, and during eight days cried incessantly. Renewed application of leeches under the left breast; strong dose of syrup of morphine; ice on the precordial region; blisters sprinkled with salts of morphia. This last means was, above all, the most efficacious. But the fits still

frequently returned. Recourse was then had to transcurrent cauterization. On the 1st September, the patient being put under the influence of anæsthetics, three *raies de feu* were passed, one extending from the inner margin of the scapula to the last rib; a second, obliquely, from the inferior angle of the scapula to the angle of the first false rib; a third, under the left breast. The palpitation rapidly diminished in frequency and intensity, and the pains left the cauterised parts; but the skin on the left side of the abdomen, groin, the left hypochondrium and the lumbar region, became the seat of acute pain. Blisters dressed with morphine having been used without lasting efficacy, these parts were also cauterised; the pain instantly ceased in these parts, and manifested itself in the thigh. From this time the patient no longer experienced palpitation of the heart. The menses appeared spontaneously after the first cauterisation, and returned at right intervals. The thigh was cauterised, and the pain migrated to the knee and leg, it was driven thence by another cauterisation to the ankle and sole of the foot, and it was found necessary to burn these parts twice before the pain was expelled.

On the next day, the 26th of November, after a long exposure of the diseased limb to cold and damp, dyspnœa again returned, with difficulty of breathing. January 18th. Return of painful palpitations of the heart; extreme sensitiveness of the skin beneath the left breast, extending to the inguinal region of the same side; cauterisation of this part for the sixth time; again the pain was dispersed and reached the thigh; the next day obstinate vomiting, &c., in short, a series of analogous symptoms equally changeable presented themselves during five or six weeks. Cauterisation was applied with perseverance, and on the 25th of March the patient quitted the hospital, after a sojourn of more than fourteen months.—*Gazette Médicale*, December, 1850.

CXXVII.—CASE OF CYANOTIC PAROTIDÆA, WITH METASTASIS TO THE TESTICLE, AND CEREBRAL COMPLICATION. CONVALESCENCE IN TEN DAYS. BY FRANCIS MINOT, M.D. (Read before the Boston Society for Medical Observation, Jan. 21st, 1850.)—Mr. A., a gentleman aged about fifty, tall, thin, with dark complexion, hair and eyes of strongly marked nervous temperament, habitually dyspeptic and low-spirited, frequently complaining of pain in the head, was more unwell than usual on the 9th of August, 1849, and, on the evening of the 10th, had swelling under the angle of the lower jaw on each side, with pain on motion of the jaw, and in swallowing. He was living at the time a few miles from the city, at a place where an epidemic of mumps was prevalent. The pain was quite severe, but the swelling moderate. He took no remedies, but kept in doors until the 13th, when he came to town to attend to some important business, although it was raining, and the weather was damp and chilly. He was well wrapped up, and did not fatigue himself.

The same evening he called upon me to say that the swelling in the jaws had abated, and that he began to feel occasionally slight pain in the testicles. He was habitually constive, but the bowels had been freely opened by medicine. He was advised to take some mild laxative medicine, to go to bed, and to apply fomentations to the jaws, with support to the testicles.

The next morning (Aug. 14th) the pain in the testicles had diminished, and that in the jaw was increased. He had had an uncomfortable night, and was very irritable and restless, complaining much of pain in the top of his head. The tongue was covered with a thin yellowish coat, and there had been no dejection. He repeated the medicine of the previous evening, but without effect; and towards night the pain in the head had increased considerably, and he had had alternations of chills and heat through the day. He was very restless and irritable, and the skin was very sensitive to the least touch. There was but little pain in the testicles. The pulse was 100, and quite full. There was considerable thirst, and no appetite. He was ordered four ounces of an infusion of senna and manna.

At 10 p.m. he had had no dejection, but passed much wind, which gave him great relief. He refused to take an enema. He had slept most of the time since six o'clock, and said he felt better, and that he had no pain in the testicles, except while standing up. Pulse 84; urine free.

August 15th. He had slept heavily almost all night. At three a.m. he got another dose of senna and manna, which operated once. His condition was as follows: drowsy; answers intelligently, but slowly, and sometimes a little incoherently; face flushed; skin hot and dry; tongue covered with a thin, moist, whitish coat; thirst moderate; bad taste in mouth; pulse 88, full, somewhat hard; urine free; no pain or swelling in angles of jaw; right testicle somewhat swollen, hard, and tender; left testicle natural. He refused to have leeches applied to the head. Thirty drops of Hoffmann's anodyne were ordered every hour and a half.

At 6 P.M., he was more drowsy and stupid; took no interest in what was going on, had some stertor, had slept heavily all day, and had had one free dejection since morning. In other respects, he was the same as at the last visit.

Dr. J. Bigelow was called in consultation. The patient's feet were placed in warm water, sinapisms were applied to the feet and legs, fomentations to the abdomen and scrotum, and an evaporating lotion to the head. Ten grains each of calomel and compound extract of colocynth were administered.

Soon after this, he suddenly began to talk rapidly, and incoherently; became unreasonable, resisting the attentions of his attendants, and frequently expectorating small quantities of frothy saliva.

At 11 P.M., his condition remaining the same, about twelve ounces of blood were taken from the arm, the operation being performed with great difficulty, on account of the opposition of the patient. This was followed by no apparent change in the pulse or general symptoms. In the course of the night, he had a free dejection, getting up to the water-closet, and returning to bed without assistance.

16th. During the night, he had no sleep, but continued talking incessantly. There were no spasms or convulsions. Dr. Bigelow being out of town, Dr. J. Ware saw the patient in consultation. His condition was very much the same. He was talking incessantly and incoherently, frequently expectorating small quantities of frothy saliva; very irritable, answering tolerably well to questions, but wandering again immediately; the pupils were natural, the eyes generally closed; the hands were constantly applied, one to the head, the other to the scrotum, supporting the testicles; the right testicle was enlarged to about double the size of the other, hard and tender; the patient said it was not painful; the left testicle was natural; no pain or swelling in angles of jaw; skin hot and dry; face flushed; eye dull; tongue and mouth as on the 15th; much thirst; pulse 92, full, not hard. Twenty leeches were applied to the temples, notwithstanding much opposition on the part of the patient; croton oil was applied to the head, and he took a little gruel, and a cup of tea.

In the afternoon, Drs. Bigelow and Ware saw the patient in consultation. A scruple of calomel was given, and leeches were ordered to the scrotum, but the opposition of the patient was such that it was impossible to apply them.

Towards evening, he grew more quiet, and the delirium abated. He sat up a few minutes, and said it gave great relief to his head. Afterwards, he lay quiet, occasionally dropping asleep, without stertor. Towards morning, he slept for an hour quietly. During the night, he rose several times, and went to the water-closet without assistance. His mind wandered occasionally, but he had no active delirium.

17th. Drs. Bigelow, Ware, and Walker saw the patient. The general condition was much improved. Pulse 84, soft; skin cool, and less dry; tongue cleaner on edges; he asked for gruel. The pain in the head was better; the mind pretty clear, though weak; he burst into tears on seeing his friends. The testicle was somewhat less swollen, though still very tender. The scrotum was somewhat oedematous. The teeth were slightly tender, and there was a bad taste in the mouth.

During the day, he sat up twice. In the evening, the pulse was 76, and quite soft. The urine was free, but high-coloured and offensive. He was very quiet and rational. The eyes were painful, probably from the effect of the croton oil conveyed to them from the hair by the fingers.

From this time, Mr. A. steadily improved, and by the 20th was convalescent. The pain and swelling in the testicle gradually disappeared. The pain in the head remained for a long time, and for several days he continued so sensitive to noise that whereas before his illness he was slightly deaf, he could now hear the lowest voice with ease.

Although cerebral complication in cases of mumps is spoken of by all writers as generally fatal, the writer has been able to find but one recorded case in the books. Eberle (*Treatise on the Practice of Medicine*, vol. ii. p. 333) says, "I have known a case of this kind terminate fatally in less than an hour, under a paroxysm of violent convulsions." Perhaps the danger of the affection has been overrated. We may suppose that the sympathetic irritation caused by the metastasis of a specific and limited inflammation would be likely to cease when the latter had come to its natural termination; and, in fact, in this case the delirium ceased on the sixth day after the first appearance of the swelling of the parotid glands, being about the time when those glands would have subsided into their natural state, in the usual course of things. But observations are wanting on this point.

By a majority of writers, metastasis to the testicle in mumps is regarded as a favourable circumstance, as serving to divert the

disease from the brain; yet, in this instance, the swelling of the testicle preceded the cerebral symptoms by about thirty-six or forty hours!—and Watson (*Lectures on the Principles and Practice of Physic*, vol. i. p. 775) remarks, "Inflammation of the brain or its membranes has sometimes occurred on the disappearance of the parotid swelling; but it has much oftener supervened, I believe, upon the retrocession of the inflammation of the testicle or mamma." But in this case there was no retrocession: the testicle continued swollen and tender during the head symptoms, and for some time after.—*American Journal*, vol. xl. page 377.

CXXVIII.—PERIOSTITIS AND ITS TREATMENT BY THE SUB-
INTEGUMENTAL INCISION.—Sometimes action seems to be partially arrested, yet does not decline; a tense and painful swelling remains, unabated, and on the contrary tending still to increase. It is plain that relief of tension would be a most important indication in such circumstances. For a similar state of matters, unconnected with bone, we would freely practise incision; tension would be at once relieved, and action would speedily decline; the wound would suppurate, and its margins perhaps slough, but granulation and closure would speedily follow. Here, however, similar procedure would be rash and untoward. Tension would doubtless be relieved; but, with suppuration, which is inevitable, would certainly come either ulceration or death of the bone; the very results which we seek to avoid. Direct incision, therefore, is plainly unwarrantable. But, by inserting a fine bistoury or tenotomy needle, at a little distance from the tense part; passing it over, cautiously, beneath the integument; then turning and pressing its edge, so as to divide the tense membrane wholly to the desired extent; cautiously withdrawing the instrument, so as to make a valvular, oblique, and subintegumental wound; and finally closing the single integumental puncture immediately, with isinglass plaster, or collodion—in fact by completing the wound so as effectually to prevent introduction of atmospheric influence, and thereby obviating the chief risk of suppuration—we may obtain diffusion of the swelling, relieve tension, and so facilitate both resolution of the action and discussion of its results. This manœuvre, however, requires skill and caution in its performance; and even with these is not wholly devoid of risk. It is therefore not to be indiscriminately employed, but should be reserved for those cases which otherwise prove obstinate, and in which aggravation and suppuration seem imminent.—*Miller's Surgery*.

CXXIX.—OBSERVATIONS ON THE REMOVAL OF LOOSE CARTILAGES FROM JOINTS, BY THE VALVULAR MODE.—In the first place, the patient is to be prepared for the operation. For a day or two, the limb is to be disused, so that previous excitement may have thoroughly subsided. Low diet is enjoined, the primæ viæ are gently yet efficiently cleared, and general secretion is seen to be in a satisfactory state, so that there may be no predisposition to inflammation. Then the foreign body, having been made superficial, is gently pushed to the extreme verge of the synovial pouch; either on the inside or on the outside of the patella, as may be most convenient. The internal position is usually the preferable; and there it is retained fixedly, by the fingers of an attentive and steady assistant. A tenotomy needle, or thin and narrow bistoury, of fine edge, is passed in an oblique direction; and an incision, a little larger than the outline of the cartilage, is made through the tense synovial membrane. The instrument is then withdrawn slowly and cautiously, the finger gently yet firmly following and consolidating its track. A few drops of blood escape, but not a particle of synovia; and no air has obtained admission, even to the areolar tissue. The integumental wound is immediately and carefully occluded, by plaster or collodion.

The foreign body is then gently pressed through the aperture in the synovial capsule, which aperture, as has just been stated, is made sufficiently free to admit of this being accomplished without force or difficulty. When exterior to the capsule, it is coaxed through the areolar tissue—sufficiently lax, readily to admit of this—by gentle pressure of the fingers; not in the track of the puncture, but in a different direction, probably at nearly a right angle to it. When about an inch and a half, or two inches, from the synovial wound, it is there permitted to remain. Not permanently, however, as has been proposed. Otherwise, acting still more as a foreign body in its recent and raw site, inflammatory action is excited, suppuration is all but inevitable, and extension to the synovial membrane becomes extremely probable; the very result to the avoidance of which all our pains had been directed. For two days, or three at the utmost, it is suffered to remain in its new locality, undisturbed; the most careful prophylactic treatment being meanwhile employed, both generally and locally, so as to avert undue excitement. By that time, the synovial wound

will have closed by adhesion; and both tracks—that of puncture as well as that of extrusion—will have been consolidated. Then, the substance having been fixed as before, a direct incision is made upon it; not more free than is sufficient for its ready removal. After it has been lifted out, the superficial and slight wound is brought together by strap; and, in all probability, it unites by adhesion.—*Miller's Surgery.*

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.—In the week ending last Saturday, 1,023 deaths were registered in the districts of the Metropolis. In the corresponding weeks of the ten years (1841-50), the average was 1,162; compared with which the present return exhibits a favourable result. And if it could be safely assumed, notwithstanding the effects of various epidemics, that the population has increased yearly at the rate of 1.55 per cent. (the annual rate of increase observed in London between the two censuses of 1831 and 1841) and the above average were proportionally augmented, the comparison would show the public health of the week in a still more satisfactory point of view. But it will be found on examination that, in five out of the ten corresponding weeks, the returns differ little from that of last week, or fall much below it, whilst an excessive mortality presses on other parts of the series, the deaths rising to 1,450, at one period, when influenza was in the wane, at another, when cholera had broken out in Drouet's Institution, and thus swelling the account above what an average state of health would produce.

The last week exhibits a marked improvement on the first week of the year, chiefly in the decline of fever and the epidemics to which children are subject, but also in the diminished effects of diseases of the respiratory organs. In the previous week the deaths from epidemics in the aggregate were 239, in the last they were 173; and to take particular maladies in this class, there were in the former week, from small-pox, measles, scarlatina, and hooping cough, 28, 29, 14, and 58, respectively; in the last week there were 16, 21, 16, 43; scarlatina alone, which however is now less fatal than usual, not showing a decrease. Typhus has declined in the two weeks from 48 to 35; erysipelas from 14 to 2. Amongst complaints which assume an epidemic character, influenza alone shows any tendency to increase; it has carried off 9 persons in the week, though it usually reaches less than half that number. In connection with three cases of typhus, which proved fatal in three different parts of the metropolis, the Registrars call attention in their notes to the circumstances in which these events occurred, here "a filthy and overcrowded court," which had been repeatedly complained of as the nursery of disease; at another place, "miserable huts," which had been constructed without regard to comfort or decency; and in the third case, a small back-room is described, where six persons had been sleeping, and into which air could not penetrate either by means of the chimney or other channel.

Fatal cases arising from affections of the respiratory organs (exclusive of hooping cough and phthisis) are diminished from 321 in the former week, to 275 in the last; and amongst these, laryngitis from 11 to 4, bronchitis from 152 to 136, pneumonia from 101 to 96, and asthma from 37 to 27. In the same period, phthisis exhibits a decrease from 147 to 123.

On the 7th of January, in St. Giles-in-the-Fields, at the Union Workhouse, a woman, who had been a servant, died, as stated in the medical certificate, from "old age and decay," after having reached the extraordinary age of 105 years. Mr. Faulkner, the Registrar, adds, that "this woman retained full possession of all her faculties till within a fortnight of her death." It is not stated, as is desirable in such cases, whether so singular a fact rests on the authority of a parish register or other sufficient evidence.

The births of 792 boys and 788 girls, in all 1,580 children, were registered in the week. The average of six corresponding weeks in 1845-50 was 1,356.

At the Royal Observatory, Greenwich, the mean daily reading of the barometer, which had fluctuated on the first four days of the week, fell to 29.385 in. on Wednesday, and then rose gradually to 29.998 in. on Saturday. The mean of the week was 29.365 in. The mean daily temperature was lowest on Monday and Thursday, when it was about 38° 5'. It was highest on Saturday, when it rose to 48° 2'. The mean of the week was 42° 2'. On every day the temperature was higher than the average of the same day in ten years. On Tuesday and Wednesday the mean was about 7° above the average; on Friday 8° 5', and on Saturday nearly 12°. The wind was south, and on the last four days was in the south-west.

The following selections are made from the Registrars' Returns:—
In Fulham-fields, at 19, Bedford-place, on 9th January, the son of an Irish labourer, aged 6 years, died of "typhus (2 weeks)." Mr. Knight describes this as "a long row of miserable huts, built a few years ago, without any regard either to comfort or decency. It was at first inhabited by gipsies, and now principally by Irish labourers."

In Hanover-square sub-district, at 1, South Molton-lane, on 6th January, the daughter of a journeyman bootmaker, aged 13 years, died of "typhus gravior." From information given to Mr. Jay, the Registrar, it appears that "the deceased slept with five other persons in a small back room, the fireplace of which was stopped up, and the ventilation otherwise quite deficient."

In the South sub-district of West London, at 6, Plumtree-court, St. Andrews, on 6th January, the son of a labourer, aged 10 years, died of "typhus (8 days)." Mr. Nason states that "he has repeatedly reported this court as the very hotbed of all epidemic diseases. It is one of the most filthy and overcrowded courts in the City of London, and in the time of cholera suffered severely."

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 10th inst.:—Messrs. John Bunney, Coventry; William Henry Paine, Stroud, Gloucestershire; Gideon James William Griffith, Mountpleasant-square, Dublin; Harry Speakman Webb, Oxford; William Dixon Grahame, London; Henry Brougham Hillcoat, Brussels; George Rhind Bull, Birmingham; Patrick Dillon Kelly, Mullingar, county of Westmeath, Ireland; Henry Thomson, Belfast; Alfred Puddicombe, Moreton-hampstead, Devon; James Bain, Bombay; and William Palmer Steele, Abergavenny, Monmouthshire. At the same meeting of the Court Mr. Charles Bedingfield Wood, and Mr. Edward Wm. Pritchard, passed their examinations for naval surgeons; these gentlemen had previously been admitted members of the college, their diplomas bearing date respectively July 11, 1845, and May 29, 1846.

BRANDING BY A SURGEON.—For several days considerable excitement has prevailed in Blackburn, by a report that Mr. Rogerson, surgeon, had branded a boy's forehead with a large letter B, which had been written on by caustic. For some time past Mr. Rogerson had been considerably annoyed by boys continually ringing his bell, and running away. On Sunday week, hearing a forcible pull at the bell, he immediately ran out and caught a boy named Woods, and shut him up in the surgery for a short time; he then got some caustic, and held the boy whilst he rubbed on his forehead the letter B. The youth stated that previous to the act being committed Mr. Rogerson asked what school he had been at. On being told at the Independents', the defendant said, "Oh, you are one of that sort, are you? then I'll make an example of you." At the police-office on Monday Mr. Rogerson was charged with the above offence. It was stated that, from the opinion of several medical men, the mark would never be erased from the lad's forehead during his life. Mr. Rogerson contradicted this assertion, and stated that all appearance would be entirely obliterated in about twelve months. Dr. Martland was of the same opinion. The defendant denied the boy's statement with respect to what school he belonged. Mr. Eccles said, that whether the mark would be then obliterated or not made no difference; he should be under the painful necessity of ordering Mr. Rogerson to enter into recognizances to appear at the next Lancashire assizes. Mr. Rogerson, seeing the serious position in which he was placed, applied for an adjournment until Wednesday, in order to consult a legal adviser, which was granted, the defendant entering into his own recognizances to appear on that day. The punishment for the above offence is transportation for life, and not less than fifteen years' imprisonment, with or without hard labour for more than three years.—*Manchester Examiner.*

DEATH OF THE REGIUS PROFESSOR OF MEDICINE, CAMBRIDGE.—Dr. Haviland, who has held the above-named appointment since 1817, expired at his residence, Cambridge, early on the morning of January 8th. In 1814, he was elected Professor of Anatomy, which appointment he resigned on his promotion to the one he held at the period of his decease. He practised for many years as a physician in the town, and held the honorary office of consulting physician to Addenbrooke's Hospital. He was 66 years of age at his demise, which though somewhat sudden at the last was not surprising, as the deceased had suffered for years from constitutional infirmity.

METEOROLOGICAL TABLE FOR THE WEEK ENDING JANUARY 11, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Clinometer above the Level of the Sea.	Barometer reduced to 32° Fahrenheit.	Mean elastic force of Vapour.	TEMPERATURE OF AIR.					MEAN TEMPERATURE OF VAPOUR.		Mean weight of Vapour required to saturate a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	WIND.		RAIN.	AUTHORITIES AND NAMES OF OBSERVERS.		
						Highest.	Lowest.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean.	Evaporation.					Dew Point.	Direction.			Strength.	
Jersey.....	49° 11'	2° 6' W.	84	29.776	55.0	37.0	50.1	41.1	9.0	47.5	46.1	44.4	3.6	0.4	0.899	540	gts.	6.8	1.34	7	1.6	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey	49° 33'	2° 40' W.	123	29.683	52.5	42.0	49.0	44.2	4.8	46.7	46.2	45.4	3.7	0.1	0.906	538	gts.	7.8	0.86	7	0.86	Dr. Hoskins, F.R.S., M.B.M.S.
Truro	50° 17'	5° 4' W.	55	29.795	50.0	34.0	50.6	40.7	9.9	47.3	47.7	43.7	3.5	0.4	0.889	540	gts.	7.0	2.38	7	0.4	Dr. Barham.
Exeter	50° 45'	3° 41' W.	140	29.622	55.4	33.0	50.8	40.2	10.6	45.8	44.5	42.9	3.4	0.4	0.900	539	gts.	6.0	1.97	5	0.9	Dr. Shapter, M.B.M.S.
Uckfield.....	50° 59'	0° 5' E.	180	29.631	50.0	27.0	46.4	35.0	11.4	40.5	39.3	37.6	2.8	0.3	0.908	545	gts.	6.1	0.55	6	0.8	C. L. Prince, Esq., M.B.M.S.
Greenwich.....	51° 29'	0° 0'	160	29.635	51.1	31.4	48.5	36.2	12.3	42.2	41.1	39.7	3.1	0.3	0.913	542	gts.	7.0	0.32	3	0.32	From Reg-Gen. Report.
Lewisham	51° 28'	0° 1' W.	78	29.717	50.7	30.0	48.6	36.9	11.8	42.5	41.8	40.6	3.6	0.2	0.931	544	gts.	7.0	0.52	6	0.7	H. Gordon, Esq.
St. John's Wood	51° 32'	0° 1' W.	150	29.545	50.0	32.5	47.8	35.1	10.5	41.0	40.1	38.5	3.0	0.2	0.931	543	gts.	5.0	—	4	0.1	G. Leach, Esq., F.Z.S., M.B.M.S.
Hartwell	51° 49'	0° 51' W.	250	29.460	50.3	30.5	47.8	35.1	12.7	40.8	40.3	39.6	3.0	0.1	0.962	541	gts.	5.5	—	4	0.1	Dr. Lee, F.R.S., Treas. M.B.M.S.
Cardington	52° 7'	0° 25' W.	100	29.649	50.4	28.2	45.4	33.9	11.5	40.2	38.9	37.4	2.8	0.3	0.898	546	gts.	7.6	0.37	5	0.4	S.C. Whitbread, F.R.A.S., M.B.M.S.
Nottingham	52° 58'	1° 10' W.	103	29.626	53.6	25.9	46.1	32.9	13.2	40.4	39.2	37.5	2.8	0.3	0.908	545	gts.	7.5	0.82	4	—	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.
Norwich	52° 37'	1° 16' E.	23	29.770	52.9	28.0	44.0	33.8	10.2	39.5	38.5	37.0	2.8	0.3	0.919	549	gts.	8.0	0.57	5	1.6	W. Brooke, Esq., F.R.A.S., M.B.M.S.
Haverdon	53°	3° 0' E.	260	29.410	54.5	29.0	45.3	35.5	9.5	40.9	39.9	38.4	2.9	0.3	0.927	539	gts.	7.5	0.63	6	0.3	Dr. Moffatt, F.R.A.S., M.B.M.S.
Wakefield	53° 41'	1° 30' W.	115	29.565	52.7	22.0	45.0	34.4	10.3	39.2	37.8	35.7	2.7	0.4	0.885	545	gts.	8.0	0.63	4	0.3	R. I. Milner, Esq., M.B.M.S.
Stonyhurst	53° 31'	2° 25' W.	381	29.260	53.6	27.7	44.1	32.7	12.4	39.6	38.7	37.4	2.8	0.2	0.930	539	gts.	7.0	1.47	7	1.2	Rev. A. Weld, F.R.A.S., M.B.M.S.
Whitehaven.....	54° 33'	3° 25' W.	90	29.523	51.5	26.7	44.7	33.1	6.3	41.2	40.6	39.8	3.1	0.2	0.954	542	gts.	5.5	1.6	5	1.9	J. F. Miller, Esq., F.R.S., M.B.M.S.
Glasgow	55° 51'	4° 18' W.	121	29.455	51.2	29.9	42.8	33.0	9.5	38.8	37.4	35.6	2.6	0.4	0.888	544	gts.	—	2.35	5	1.5	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.
Dundee	56° 16'	2° 49' W.	250	29.225	51.0	25.0	40.0	31.4	8.6	36.8	35.6	33.7	2.5	0.3	0.900	542	gts.	6.9	0.80	5	1.4	David Muir, Esq., M.B.M.S.

The highest readings of the thermometer in air, were 56° at Wakefield; 55.4° at Exeter; and 55° at Jersey and Truro; and the lowest readings were 22° at Wakefield; 25.9° at Highfield House, near Nottingham; and 26.7° at Whitehaven.

The least daily ranges of temperature took place at Guernsey, 4.8°; at Whitehaven, 6.6°; and at Dumno, 8.6°; their mean value was 6.7°; and the greatest occurred at Nottingham, 13.2°; at Hartwell, 12.7°; and Stonyhurst, 12.4°; and their mean value was 12.8°.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Temperature.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.
																		General Direction.	Average Strength.	Average number of days it fell.	Average fall.	
Jersey to Exeter	Feet. 100	49.56°	in. 29.720	0.306	54.5	37.0	17.5	50.1	41.6	8.6	46.8	45.6	44.1	3.6	0.3	0.916	537	S.W.	1.2	7	in.	6.9
Uckfield to Hartwell	164	51.37°	29.596	0.258	50.4	30.3	20.1	47.5	35.8	11.7	41.4	40.5	39.3	3.1	0.2	0.939	543	S.W.	0.4	4	0.4	6.0
Cardington to Norwich	108	52.34°	29.682	0.241	50.8	26.4	23.4	45.2	33.5	9.6	40.0	38.9	37.3	2.8	0.3	0.908	547	S.W.	0.4	4	0.5	6.9
Hawarden to Stonyhurst	212	53.41°	29.441	0.245	53.9	27.4	27.5	45.0	35.2	9.8	40.2	39.3	37.8	2.9	0.3	0.924	541	S.W.	1.5	5	1.3	7.0
Glasgow and Dundee	186	56.4°	29.240	0.219	51.1	23.0	22.1	41.4	32.2	9.3	37.5	36.5	34.7	2.6	0.4	0.894	543	S.E.; S.W.	1.5	5	1.1	6.9

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

At JERSEY, on December 31, flowers of heliotrope, scarlet geranium, scarlet salvia, scabious, and of several other plants were gathered in the open garden. At GUERNSEY, on January 5, the sky was partially overcast, with gusts and squalls. On the 8th rain fell in squalls, accompanied with hail. There was fog on the 11th.

At TRURO, on January 5, the morning was frosty but showery; the night being wet. On the 8th, the morning was fair with a light breeze; but about 1 A.M., the wind rose almost suddenly to a gale, and did considerable damage; in the evening it fell again, accompanied with rain; at night (towards morning) there were showers of hail with squalls, lightning was seen, but thunder was not heard. On the 10th and 11th, drizzling rain fell, and the weather was cloudy and damp.

At EXETER, the morning of the 8th was fine, the wind blowing from the S.E. at 1 P.M.; at 3.30 P.M. rain was falling, and the wind blew from S.W., thence from W., and ceased about 7. So that this gale commenced in the S.E., and passed through S. to W., and the reading of the barometer fell to 29.180. The 9th and 10th days were partially overcast and nearly calm.

At UCKFIELD, the weather during the week was variable in character. Jan. 5th was fine with cumulo-strati clouds. Mr. Prince observes, that the day was spring like. The 6th and 7th were dull and overcast. The morning of the 8th was foggy, but the day was fine; the evening was stormy and showery. The 10th was a damp day with almost continued rain. The 11th being densely overcast and very mild.

As a proof of the great mildness of the season in the south of England I may observe, that the robin and thrush have been singing throughout the past week, and the following flowers are in bloom in the open air—the violet, primrose, polyanthus, snowdrop, wallflower, common white stock, and the PYRUS japonica. The rose-trees, lilac, and ribes sanguineum are budding. At St. John's Wood, Jan. 5th and 6th were fine, with light clouds. The 7th was hazy with rain during a part of the day. The morning of the 8th was foggy; rain and wind towards evening. The 9th was a fine day. On the 10th rain fell from 2 A.M. till 2 P.M.

At HARTWELL, on Jan. 6th the day was partially cloudy, with a slight hoar frost in the morning. Rain fell on the 7th. On the 8th, between 12 P.M. and 6 P.M. the wind was high and accompanied with rain; between 6 P.M. and midnight the wind was very violent and blew from the South; between midnight and 6 A.M. the sky was clear and the wind was still violent. There was white frost on the morning of the 9th. On the 10th and 11th days rain was falling and the sky was overcast. Mr. Samuel Horton, Assistant to Dr. Lee, observes that, owing to the mildness of the weather, many bunches of snowdrops are out in full bloom, which is a very unusual circumstance. The redwing has not been heard this winter, and on only one occasion has the fieldfare been seen. Berries and haws are very scarce, and there are none on the trees in Hartwell Park.

At CARDINGTON, on the evening of Jan. 8th, a gale of wind arose about 6 P.M., and increased greatly in force, and attained its greatest strength between 9 and 10 P.M.; it then continued to decrease in strength until 6 A.M. There was no corresponding fall in the reading of the barometer.

At NOTTINGHAM, the morning of Jan. 6th, was misty, which gradually increased in density, until in the afternoon the tops of trees and houses were invisible, when quite close to them. The 7th was misty, and rain fell from 6 until 9 P.M. The morning of the 8th was fine, with rain in the afternoon. A very violent gale sprung up, accompanied with heavy rain from 9 to 11 P.M. At 3.35, a loud peal of thunder was heard in S.W. During the remainder of the week, from Jan. 8th, was fine and mild. On the afternoon of the 11th, thunder was heard in N.E.

The warm weather, especially of the 11th, made the hepaticas, Prussian violets, and winter-aconites, burst into full bloom.

At NORWICH, on the morning of the 6th, thick time was observed. On the 7th, the sky was partially cloudy, and heavy rain at night. The 8th was overcast during the day, light showers at night. The 9th was cloudless. The 10th and 11th were overcast, with rain on both days.

At WAKEFIELD, on the afternoon of January 6th, there was a dense fog; also on the morning of the 7th.

At STONTHURST, January 5th was showery, with drifting sand. The 6th was clear and frosty. The 7th was overcast, with heavy rain. The 3rd was frosty, sun shining during the day, rain at night. The 9th was fair, with a strong cold wind. Rain fell on the 10th and 11th days. The temperature was mild.

At WHITEHAVEN, heavy falls of rain during the week, the atmosphere very damp. Snow fell on the night of the 8th, being the first fall this season.

At DUNINO the weather has been gloomy, with occasional fog and mist.

At JERSEY, rain fell on every day during the week; the largest fall occurred on the 10th; the amount was 0.43 in.

At GUERNSEY, rain fell on every day throughout the week; the greatest amount was 0.29, and occurred on the 5th.

At TRURO, rain fell on every day during the week; the largest falls were 0.56 on the 5th, and 0.70 on the 6th, and 0.67 on the 10th.

At EXETER, rain fell on Jan. 5th, 6th, 7th, 8th, and 9th; the largest amount 0.90, occurred on the 7th.

At UCKFIELD, rain fell on Jan. 5th, 8th, 9th, and 11th; the largest amount 0.44, occurred on the 11th.

At GREENWICH, rain fell on the 7th, 8th, and 10th; the largest amount 0.28, fell on the 10th.

At St. John's Wood, rain fell on the 7th, 8th, 9th, and 10th; the largest amount 0.260, fell on the 10th.

At CARDINGTON, rain fell on Jan. 5th, 9th, 10th, and 11th; the greatest amount 0.180, occurred on the 11th.

At NORWICH, rain fell on January 7th, 8th, 9th, 10th, and 11th. The greatest amount, 0.20 in., occurred on the 11th.

At NOTTINGHAM, rain fell on January 7th, 8th, 9th, and 10th. The greatest amount, 0.305 in., occurred on the 7th.

At HAWARDEN, rain fell on January 6th, 8th, 9th, and 10th. The greatest fall, 0.25 in., occurred on the 9th.

At WAKEFIELD, rain fell on January 7th, 8th, 9th, and 10th. The greatest fall, 0.245 in., occurred on the 8th.

At STONTHURST, rain fell on January 5th, 7th, 8th, 10th, and 11th. The greatest fall, 0.694 in., occurred on the 10th.

At WHITEHAVEN, rain fell on January 5th, 6th, 8th, 9th, 10th, and 11th. The greatest falls were 0.692 in. on the 5th; 0.634 in. on the 8th; and 0.662 in. on the 9th.

At GLASGOW, rain fell on January 5th, 8th, 9th, 10th, and 11th. The greatest fall, 0.29 in., occurred on the 8th. The rain at Glasgow is registered by Mr. Gardner; the surface of the gauge is placed at a few feet above the surface.

At DUNINO, rain fell on January 5th, 7th, 9th, 10th, and 11th. The greatest fall, 0.96 in., occurred on the 9th.

At GUERNSEY, scarlatina and mumps disappearing; measles mild.

At TRURO no disease can be regarded as prevalent; slight catarrhs are common. There are some cases of small-pox and scarlatina, both generally mild. In some country districts in the neighbourhood, typhus has been rather prevalent and severe. The simple continued fever, of which there have been more cases than usual in Truro, has been generally mild.

At EXETER there is no prevailing disease.

At UCKFIELD there was one case of typhus and several cases of influenza during the past week.

At St. John's Wood, the prevalent diseases are measles, bronchitis, catarrhal affections, hooping-cough, rheumatism, dyspepsia, and disturbance of the biliary system, accompanied by general nervous depression, as reported by J. H. Roberts, Esq.

At CARDINGTON, a few cases of typhus, influenza, diarrhoea, and measles, in Bedford and neighbourhood during the week ending January 11th, 1851.

At NOTTINGHAM there is no prevailing disease, the neighbourhood is very healthy.

At NORWICH, the prevailing diseases of the week have been bronchitis and influenza. Scarlatina still lingers in the city.

At HAWARDEN, on Monday 6th there was slight frost; during the day cirrus clouds appeared, and from this until Thursday the 9th, the barometer gradually decreased. Considerable diminution of temperature also occurred; the difference between the maximum of Tuesday and Wednesday being 4.9°; and above the freezing point. The difference for the same days, in the rays of the sun, was 4°; amount of cloud being equal. On Tuesday the sign of electricity in a dynamic form was 1, and on Wednesday it was 4. Peitler's electrometer giving a proportional sign of increase, viz., from 2° to 5°. During the whole of Wednesday, the wind was South; its average amount being 1. At 8 P.M., it became W.N.W., amount 4, with sleet. The change was very sudden, and unexpected; and shipping has sustained much damage along the coast. On the 7th, we had one case of toothache, one of hepatic derangement, and one of miscarriage with all but fatal hemorrhage. On the night of the same, one of diarrhoea and vomiting with slight cramps in the thighs. 8th, one case (infant) of convulsions; one, sore throat; one, catarrhal affection; and one, influenza. On Thursday, 9th, barometer increased 0.5 in., with increase of temperature, and there has been a steady increase since. Snowdrop is in flower, and rose-trees are budding.

At WAKEFIELD, there have been a few cases of fever, hooping cough, and scarlet fever, but on the whole, there is less than the average sickness at this season.

At WHITEHAVEN, no prevalent disease. The town has been in a remarkably healthy state, throughout the year 1850, which is chiefly attributed to the plentiful supply of pure water from Ennerdale Lake.

The city of GLASGOW is in a very healthy state.

At DUNINO, during the past fortnight, mumps have prevailed. The weather all over the country continues of an unusual and unseasonable character, the period in the month of January within the preceding ten years which most nearly resembles the present, was in the year 1843, after the 23rd day. On Saturday, the 11th, the mean temperature exceeded the average due to the season by 12°; and no day within the first eleven days of the year, in the preceding ten years, was of so high mean temperature. The mean temperature of every day in the week was above its average value. The sky was somewhat less cloudy than in the preceding week, but nevertheless, it was for the most part covered by cloud. The air at most places was frequently at nearly the point of saturation. The difference in the falls of rain at different places is remarkable on the 5th, the air was differently distributed over the country; the reading of the barometer, when reduced to the level of the sea, was 29.56 N. of latitude 53°, and it was 29.72 S. of that parallel. At 9 A.M. on this day, the reading of the thermometer at Nottingham was 30°; and at Jersey was 48°.

On the 6th, 7th, and 8th, the air was almost equally distributed over the country, the reading of the barometer being 29.67, 29.61, and 29.51 respectively. The extremes of temperature at 9 A.M. were on the 6th, 25.8° at Wakefield; and 47.5° at Truro; on the 7th were 30° at Dunino; and 50.0° at Truro; on the 8th was 32.5° at Hartwell; and 50.0° at Jersey. On the 9th the air was equally distributed over England, Guernsey and Jersey, and the reading of the barometer was 29.99, but at Dunino, and Glasgow it was 29.62 only; in like manner, on the 10th, the reading was 30.07 at all places, except Glasgow and Dunino, where it was 29.76, and on the 11th day it was 30.13 at all places. It will be understood that these readings are referred to the same level.

JAMES GLASHIER, F.R.S.,
Of the Royal Observatory, Greenwich.

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A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
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VOL. II.—No. 4.

LONDON, SATURDAY, JANUARY 25, 1851.

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No. of Policy.	Name of Life Assured.	Term of Years during which Bonus accrued.	Sum Assured.	Bonus.	Total Amount paid.	Bonus per Cent. on the Sum Assured.	Bonus equal to the undermentioned per Cent. per Annum on the Sum Assured.
			£	£	£	£ s. d.	£ s. d.
213	His Majesty William IV.	14	3,000	1,068	4,068	35 12 0	2 10 10
69 & 92	His R. H. the Duke of York	7	5,000	962	5,962	19 5 0	2 15 0
1,458	Mrs. N. Hyde	20	400	284	684	71 0 0	3 11 0
5,610	Admiral Sir W. Sidney Smith ...	8	1,700	324	2,024	19 1 2	2 7 8
3,422	The late Duke of Argyll	14	5,000	1,453	6,453	29 1 2	2 1 6
3,604	The late Earl of Clarendon	13½	2,500	1,120	3,620	44 16 0	3 6 4
687	M. S. (Berks)	21	400	437	837	109 5 0	5 4 1
1,578	Rev. Thomas Crompton	20	500	350	850	70 0 0	3 10 0
7,828	William Gilles, Esq.	8½	500	197	697	39 8 0	4 12 9
756	George Jones, Esq.	21	5,000	3,754	8,754	75 1 7	3 11 6
1,915	Sir John S. Scbright, Bart.	25¾	5,000	3,980	8,980	79 12 0	3 1 10
1,120	Nicholas Doidge	28	100	126	226	126 0 0	4 10 0
1,010	Rev. F. W. Blomberg, D.D.	28	3,000	3,596	6,596	119 17 4	4 5 8
6,059	Rev. Richard Tillard	18½	1,000	814	1,814	81 8 0	4 9 2
6,630	Ditto	16¾	1,000	773	1,773	77 6 0	4 12 2
782	Mrs. Sarah Cope	33	1,000	938	1,938	93 16 0	2 16 10
5,073	James Price	21	200	208	408	104 0 0	4 19 0

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HENRY DESBOROUGH, SECRETARY.

ORIGINAL COMMUNICATIONS.

DIAGNOSTIC AND THERAPEUTIC
REMARKSON
RENAL ELIMINATION.

BY J. S. SUTHERLAND, M.D.

Leamington.

THE probable chemical process by which the vital functions elaborate the various animal fluids and solids, has, with much beauty and strong impression of truth, been illustrated by various medical philosophers.

To these processes, when completed so as to minister to the support and reproduction of the animal frame, the terms primary and secondary assimilation have been applied; terms sufficiently obscure, and in themselves presenting no distinct expression of any meaning; the former involving the act of digestion and blood-making, the latter implying the dissolution of tissues.

The minute chemistry of these processes is of little value to the man in active practice, but the whole, as a process of elaboration, is of distinct importance to him.

The eliminating power of the kidney being strictly of a purifying nature, and consequently of essential value to the due performance of the other organs, is, perhaps, the very first function impaired in disease, whether acute or chronic; and in virtue of this aptitude to take on diseased impression, it forms an index of disease, as certain as the mercurial column does of the atmosphere. A diagnostic scale may thus be formed. Thus inflammation and congestion of an active nature are accompanied by urates—uric acid, albumen. Passive congestions and neuroses are indicated by oxalates, phosphates, &c.; whilst cystive saccharine matter, purulent deposits, animalcules, and the various pigmentous secretions, lead to the supposition of special and deep seated, if not organic causes of mischief.

But it is not only necessary to detect these, the value of each must be specially estimated, both by itself, and also when met with in conjunction with another symptomatic product of the renal secretion. There may be a rapid change in function, indicating as rapid a change in the nature of the disease. Thus spasm may imitate an inflammation in almost every respect but that of the condition of the urine—the urine will be found pale and devoid of solids, but when the secretion either suddenly or gradually acquires density and acidity, let the practitioner be on his guard, for real inflammation is at hand—the nervous disorder has run into its antetype, inflammation.

The products of the kidney, both natural and morbid, are easily distinguished by chemical re-agents, and especially by the microscope; but to render this beautiful study subservient to the diagnosis of disease in remote organs, as well as in the renal glands themselves, it is of much importance to simplify; chemical processes require time, and a sufficiently powerful microscope can be a bulky instrument. It is only, therefore, in the study they can be used advantageously, where nice manipulation can be had recourse to; and a frequent practice of it in the study leads to an analytical education of the eye, which will in a great majority of cases be sufficient to point out the necessity or otherwise of more minute analysis. The eye, with the assistance of a small pocket urinometer, can easily recognize,

First, colour indicating undue acidity, excess of urea, bile, pigments, &c.

Second, absence of colour, indicating deficient urea, deficient acidity, deficient consistency, &c., except in diabetes.

When the diagnostic value of colour is combined with that to be obtained from a knowledge of the specific gravity, we gain a further step: for instance, combine pale secretion with low specific gravity, the probability is that Bright's disease is indicated; combine pale secretion with high specific gravity, we have diabetes. Moreover, high specific gravity, combined with high colour, undoubtedly indicates animal power or inflammatory disease; but as high colour may exist with low specific gravity, and *vice versa*, although rare, it becomes necessary to use the urinometer constantly.

By generalizing, simplicity is aimed at. As an example of the difficulty of bedside analysis, suppose the practitioner is called to give an opinion, and finds diuresis a prominent feature. Moore's and Frönum's tests for sugar require solution of potass, sulphate of copper, test tubes, and a spirit lamp; these are difficult of application, even if present. The test by yeast, and that by

polarized light, are quite impracticable; the microscopic test for spores requires heat of several hours duration.

With a view to simplify this detection of sugar, and with the limited experience of four cases of diabetes occurring within the last four years, we have observed a very characteristic effect result from tincture of the muriate of iron employed as a re-agent on urine of a saccharine nature. To a test tube half filled with suspected urine add two drops of tincture, gently and carefully dropped, so as not to run down the side of the tube. If sugar in any quantity is present, an opalescent albuminous looking troubling takes place to the depth of a quarter of an inch from the surface, which gradually becomes crimson.

The tincture of the muriate of iron produces no action on uric acid, urates, oxalates, phosphates, or albuminous urine; nor with that characterised by an excess of urea. Without asserting upon such a limited number of experiments, that this test is infallible, or possessed of any delicacy in detecting minute proportions of saccharine ingredients, it seems well adapted for general use.

There is one point intimately associated with the physiology of depuration, which has not been sufficiently dwelt upon by writers on this subject, viz., the almost total inefficiency of diuretic medicines in exciting depuration, for aqueous filtration is not depuration. Depuration, or the elimination of effete tissues in the form of salts, is the office of the tubuli uriniferi. Aqueous filtration is the office of the Malpighian bodies; the latter are comparatively easily excited to action; the former are a little under the influence of drugs. Water therefore, may easily be separated from the blood, leaving the poisonous effete matter more concentrated, and consequently more poisonous, diuretics are therefore directly injurious. This is self-evident, and points to the cause of failure in the treatment of calculous disorders, when chemical antagonism forms the principal of action, namely, the total incompatibility of dynamic or vital chemistry, with the science of the crucible and alembic. Before calculous disorders can be successfully treated by chemical re-agents, these re-agents must be used in such required proportions as to correspond exactly with the two great processes of reproduction and waste, called primary and secondary assimilation. In order that these may thus correspond, the atomic proportions, which rule with despotic power every chemical action and its results, must be adhered to, to an atom. A fraction of a grain of an acid or an alkali, or a still more subtle aura of a gaseous fluid, is enough to alter totally a chemical substance. Chemically speaking, the difference between sugar and oxalic acid and starch, is inappreciable to the senses, and almost as inappreciable by chemical analysis; yet the one is convertible into the other by the vital chemistry of digestion. Differing from each other only in an atom of chemical proportion, a very common-place disorder, or a very fatal disease, is elaborated.

With this proof of the delicacy of dynamic chemistry, is it not, at the least, of questionable propriety to give acids, and alkalies, and metals, in utter ignorance of the quantities required to produce a required chemical result? Nor must it be forgotten how various are the elements that enter into, or that forward or retard, a chemical action. Thus, disproportion of elements of food, noxious ingredients therein, temperature, consistency, superabundance, deficiency, are all involved in the chemistry of assimilation; to these may be added the more subtle influences communicated by the senses, the stimuli to which, whether excessive or deficient, whether too intense or too prolonged, all bear a part in the process; receiving impressions derived from chemical, mechanical, electric, calorific, and psychological agencies, and further modified by anatomical conformation, age, sex, and influence of the will.

This may, in a way, illustrate the potentiality of vital chemistry; but it fails to give any idea of its infinitesimal power. The alveolar glands of the cobra de capello secrete a fluid, which, to the great Liebig's analysis, betrays nothing beyond the chemical properties of gum-water; yet a drop of this gum-water, not more an entity to the eye than the tiniest dew-sphere on the petal of a rose, possesses wholly within itself a mysterious power, fearfully destructive to life. In what laboratory was that little globe formed? But the physician who expects to control the chemistry of digestion by acids, and alkalies, and metals, might just as well attempt to form such a sphere; they are both chemical actions of a vital nature, equally occult, mysterious, and unapproachable by human skill.

Another point in the diagnosis of disease, too little adverted to by practical men, is the elimination of urea; for the term depuration, applies to all the solid ingredients of the renal secretion. An excess of urea is a rare disease, and may be considered a disease of colliquation. A deficiency of urea is a common disorder, and may be considered of importance according to its completeness and permanency. Deficiency is entirely character-

istic of chronic disease, and being the substance into which the nitrogenous elements of food are converted, and afterwards eliminated, its retention most naturally occasions cause for alarm. In a large proportion of chronic diseases, urea is accumulated in the system, through impaired integrity of the eliminating organs, the kidneys, but there is much reason to suppose, that a compensating eliminatory process is set up in the skin and the lungs, and probably, also, in the bowels. That the skin throws off urea, may be proved by applying to the stomach a pad, wrung out of cold water, and occasionally renewed; in a few days a strong odour of urea will be exhaled from the surface covered by the pad; but this will only occur if urea exists in the blood in any seriously abnormal quantity.

If the skin, the lungs, and the bowels, did not take up the vicarious duty of the kidney, hysteria, which is by no means a disease of a fatal nature, would be imminently dangerous to human life, for in that disease urea is most imperfectly eliminated, and this feature of hysteria leads to a further consideration, namely, the individual part borne by retained urea, in developing other pathological conditions indirectly connected with hysteria. The most interesting of these, occasionally a precursor, but more frequently a sequela of the disease, is undoubtedly anaemia, and its prototype chlorosis.

"Bright's disease" of the kidney has generally been supposed to be characterized by albumen, or fatty globules; but it is much more so by deficient urea, for in reality, it is only in the early or inflammatory stage of the complaint that albumen is eliminated. In regard to urea, colour, and specific gravity, the renal secretion of hysteria and Bright's disease are exceedingly similar, for neither albumen nor fatty globules are essential in the latter disease. How then are they to be distinguished in the female? Not by the examination of the secretion during its ordinary state, but by the examination of it when casual acute disease has temporarily excited the vitality of the eliminating organs; and which, if Bright's disease be present, will again present an albuminous condition of the urine.

The points of resemblance between the two diseases are threefold; viz., 1st. Deficient elimination of urea; 2d. Superabundance of urea in the blood; and 3rd. A great tendency to diminished blood-making power.

Analogy of pathological condition in diseases usually considered distinct, may lead to deductions, if not of absolute practical value, at least, of some interest in a philosophical point of view; thus in both diseases above mentioned, the presence of urea in the blood, is incompatible with the existence of the red blood corpuscle—the latter is gradually annihilated. Urea and iron are obnoxious to each other, the blood disc is chemically changed by the urea, and the well known endosmotic property of the enveloping membrane affords every facility for a chemical action. But when the antagonism and chemical re-action on each other of red blood and urea are referred to, the one a result of primary the other of secondary assimilation, the vital chemistry which presides over the process, must not be confounded with the science of the laboratory; nor must it be expected that the red blood corpuscle when brought in contact with healthy urine, must become blanched as it is in a blood vessel, the fluids of which are contaminated by urea.

Is there any direct evidence that such a complicated action as the digestion of aliment is under the control of chemical re-agents? and is there any principle upon which the accomplished physician prescribes them? He certainly endeavours to avoid ingredients which he knows would, in a chemical sense, neutralize each other or produce new compounds. But beyond this all principle of chemical therapeutics is wanting. If acids, and alkalies, and metals are prescribed in clumsy doses, the physician must calculate that only so much of the substance is to be assimilated as may be required for a chemical action, and that any superabundance, must be eliminated by the various emunctories; but in order that this theory may be supported, he must forget that nothing of a soluble or digestible nature passes off from the system, except as eliminated from the blood itself. If the metal iron be taken as an example of chemical therapeutics, it will be found that every practitioner has his favourite preparation of it. He generally chooses the latest invention; he has run up the carbonates, muriates, sulphates, citrates, and has at length arrived at the proto-ioduret* which sounds well in a prescription, and is distinctly chemical in its nature. It is therefore necessary to investigate the action on digestion which this substance may be expected to exert. Can anybody say what part is enacted by the iron and what part by the iodine? Can he say whether a chemical

action at all is formed within the body, or whether a compound of a most deleterious quality may not be formed, for we know that iodine is often retained in the system with much injury to it?

Again, it is no uncommon thing to prescribe acids upon the same principle, and even to combine them. Thus hydrochloric acid, for neutralizing various conditions of the urine, viz., alkaline; oxalic, and even lithic acids. But a higher degree of accomplishment in chemical therapeutics, leads the physician to prescribe the nitro-muriatic acid in such cases. Can he state the chemical action that takes place?

It must be evident to many, that chemical therapeutics have arrived at such a state of advancement as to savour of the mysterious if not of the visionary, and that the man who retraces his steps towards the ancient simplicity of Hippocrates may not be on the worst road of the two. Nor is evidence wanting that such a retrograde movement is in progress.

OBSERVATIONS

ON THE

CLIMATE AND DISEASES OF VAN DIEMEN'S LAND.

By J. BRYANT, Esq.

VAN DIEMEN'S LAND, discovered by Tasman, a Dutch navigator, in 1642, and first colonized by the British Government in 1803, is an island of the South Pacific Ocean, opposite New Holland or Australia, from which it is separated by Bass's Straits. It is about 200 miles in length by 150 in breadth, and comprises an area of about fifteen millions of acres. Its surface is generally mountainous, rough and hilly, and rugged, with ravines and gullies, many of which have a small stream running down them. But it possesses also many fertile plains, and, indeed, in general, a varied soil, favourable to the growth of all the vegetable productions of the parent country. Its South Cape is in latitude 43° 38' south, and longitude 146° 56' east of Greenwich.

Hobart Town, the capital of the island, is seated on the west side of the estuary of the Derwent, which is here an arm of the sea about a league in breadth, and one of the noblest harbours in the world. The site of the town, corresponding with the general character of the country, is hilly and undulating; and a stream of water issuing from Mount Wellington, which rises nearly four thousand feet high at the western extremity of the place, flows through a narrow valley in its centre. The streets cross each other at right angles, and being mostly built upon hills and declivities continuous of the mountain range, the amphitheatrical effect of the whole, as seen from the harbour, or the opposite shore, is remarkably picturesque and agreeable.

Climate.—The southern hemisphere is rather colder than the northern under corresponding degrees of latitude, and more distinguished also for the greater equality of its seasons. The climate of Van Diemen's Land in 42° south (by which the island is divided into the counties of Buckingham and Cornwall), is not much unlike, indeed, the climate of England in 52° north, unless in its peculiar dryness and the superior mildness of its winter—the cold being seldom more intense than barely to produce a hoar frost on the surface. The thermometer rarely falls below 40°, and generally ranges from 50 to 60. Nor is the heat of summer—December, January, February—often excessive, there being in general regular sea-breezes which blow all the day, during which the thermometer seldom rises above 80° and usually ranges between that point and 66°. In spring it is from 50 to 60°, when the weather is usually bright and clear, with occasional rain and high winds. March, April, and May are the autumn, which is the pleasantest season. June, July, and August are the winter months, the season of moderate and kindly rain, and, indeed, by excellence, the season of verdure. A moderate degree of warmth, accompanied by moisture, hastening the growth of all the vegetable tribes, as in our climate on the return of spring.

The following table, compiled from the observations of Mr. George Frankland, late Surveyor-General of the island, exhibits the average temperature, &c., at Hobart Town, during the years 1829 and 1830. The observations were taken three times a day, but have been reduced for brevity to the present form:—

* There is such a combination of iodine with mercury, the term is merely used to illustrate a combination which any one might introduce into practice, and which would not be more mysterious than the former.

1829.

1830.

	Mean tem- perature.	Highest.	Lowest.	Variation.	Mean tem- perature.	Highest.	Lowest.	Variation.	Barometer.	Rain in Inches.
January ...	64.66	72	58	14	68.	80.	62	18.	29.62	2.750
February ...	67.63	78	60	18.	67.	80.	62	18.	30.24	1.525
March	67.10	82	62	20	65.5	79.	59	20.	30.04	1.
April	62.10	75	52	23	60.	66.	52	14.	29.90	.575
May	55.17	65	48	17	54.5	62.	50	12.	29.98	1.125
June	53.33	64	44	20	51.8	54.	46	8.	30.01	1.375
July	52.66	66	44	22	52.	60.	42	18.	29.96	1.05
August	54.67	60	52	8	52.6	61.	45	16.	30.14	1.250
September ...	57.50	68	52	16	55.4	63.	49	14.	30.12	1.60
October ...	61.2	72	54	18	60.25	67.5	54	17.5	30.17	2.125
November ...	63.25	75	58	17	60.66	70.	54	16.	30.	1.175
December ...	66.13	76	60	16	64.66	84.	56	28.	29.82	3.125
Total 18.635										

The prevailing wind is the N.W. in the proportion of 3 to 2 of all the rest. Then follow the N., N.E., S.E., S. and W., nearly equally—the North in that hemisphere being of course a warm wind and the South a cold one.

In general, however, the climate is excellent and the population healthy, although the convict class, as might indeed be expected, are usually tainted with a numerous class of diseases originating in want and debauchery in the places from whence they came. Up to 1833 however, it is believed that no instance of syphilis in its primary form had occurred in the island. Nor had hooping-cough, measles or scarlatina been observed. The children grow up tall and thin, and exhibit much activity both of body and mind; and some of the convicts who do not indulge in ardent spirits, the bane of our colonies, appear to put off that appearance of senility beyond their years, which is too generally characteristic of these unfortunates, after a short residence in the island.

The most frequent diseases are affections of the liver, stomach and bowel complaints, common and remittent fevers, rheumatism, and ophthalmia.

Some of these diseases are doubtless occasioned by errors in diet, sudden and considerable changes of temperature, &c., which are not uncommon, and some are undoubtedly owing to the presence of malaria in particular localities.

Hobart Town, like most other new places elsewhere, is laid out in small parallelograms or allotments of half an acre and upwards, as in most of our villages and the suburbs of London; and consequently occupies—streets, gardens and all, a very large space of ground in proportion to the number of inhabitants. But neither in town nor in camps is space by itself a criterion of salubrity, which rather depends upon efficient drainage and other analogous circumstances. Hence, in 1831, when a fever prevailed at Hobart Town, in a great measure as I conceived from a want of attention to these very circumstances, I was led to remark that it was surely time to investigate this subject with the deepest attention, and to adopt some adequate system of relief from nuisances which threatened to entail upon us the miseries of an annual succession of fevers; that the impurities which time and the habits of the people had long been accumulating, were now annually exposed to the heats of a burning summer, and that the limpid mountain stream of the first settlers (*ante*), which, unless after heavy rains was seldom very considerable, had at length become the cloaca or common sewer of the place, and a prolific source of noxious miasmata; that some of the principal streets were found in the valley of the rivulet (*ante*), and that in its course also, and in the heart of the town were several mill-ponds and other nuisances. Other sources of contamination were to be found in the numerous gullies and depressions between the hills upon which the rest of the town is built; the breaking up of old ground for the first time in the allotments, the subsequent manuring of these allotments, and the very imperfect drainage of the streets, many of which were soft and marshy.

Remittent fevers, as already observed, were rife at Hobart Town in the autumn of 1831, mostly indeed in those parts of the town which *à priori* might have been expected to produce them, viz., the valley of the rivulet and the adjacent streets. Of forty-nine cases which occurred to Mr. Westbrook, a general practitioner of the place, forty-five being found in this locality. In these cases children and females appear to have been the principal sufferers, and the duration of the fever seems to have varied from six to fifteen days, but I have reason to believe that relapses were frequent.

These cases occurred between February and April, but the fever persisted much longer, and did not finally terminate until the beginning of June. "We regret to state," says the *Tasmanian*,

a newspaper printed at Hobart Town, 6th May, "that the fever, which has for some time so generally prevailed in almost every family in this town and neighbourhood, seems rather to increase than to abate. It is needless to describe the very distressing effects, for they are experienced by almost all the community. It is, however, some consolation to know that, severe as are the sufferings of every patient subject to its calamitous influence, but few deaths in comparison with the number of the sick have taken place." In the same number of his paper, the Editor proceeds to comment on the feuds and animosities of various individuals, into which we need not follow him. "There is," says he, "a general state of public and private dissension, which looks as if the demon of discord had succeeded in creating universal animosity." Certainly the shallow complexions, the irritable habits, and the melancholy tempers of the inhabitants afforded decided evidence of a very general state of malaria and ill-health. But this is nothing new.

During the earlier periods of the epidemic nearly all the cases occurred in the streets bordering on the rivulet (*ante*);* and although other parts of the town were subsequently affected, the vicinity of the stream certainly produced the greater number. Fifty-three occurred at the Female Penitentiary, also on the stream, but at a short distance from the town, which contained at the time about two hundred prisoners. None of these proved fatal, but there was a considerable mortality among the children in a part of the building used as a nursery. Sixteen children and a nurse were also attacked at the Female Orphan School, on dry and rising ground, which contained at the time about eighty inmates; but of more than a hundred cases which occurred to me in all, I lost only a single patient, who died of typhus.

These fevers, however designated, were undoubtedly identical in many respects with the bilious remittents of various tropical countries, the common remote cause of which has been generally assigned to marsh miasmata, for the production of which, as every one knows, marshes *proper* are by no means required. Wherever the process of decomposition is going on to any extent, this poison may be eliminated, as well by the barren rocks of the Cape de Verd Islands, as the dry gullies of Sicily and the sandy hills and streets of Sydney, though, perhaps, as Mr. Bland observes, of the latter, "not in that state of intense concentration in which it produces its most destructive overt effects; but still of sufficient strength to be detected by sufficiently discriminative tests of its presence, as in the production of intermittents, not to mention a long train of indispositions which on careful inquiry may appear solely or almost solely depending upon no other cause." Where the trees are all evergreens and there is no annual fall of the leaf, there is, of course, less malaria than in some other countries in a state of nature; but I do not attribute the comparative freedom of the Austral-Asiatic colonies from fevers of the intermittent and remittent kind so much to this circumstance, as to the dryness of the climate during the hot seasons, and the absence of the requisite temperature for the production of malaria to any extent during the rainy ones. But to proceed.

The fever which prevailed at Hobart Town in 1831, usually presented itself in the guise of those diseases which are commonly called bilious, with languor, lassitude, pains of the head or stomach, and slight diarrhoea, very seldom with decided rigors, though a slight chill was frequently felt. Pulmonary affections were rare, though the muscles of the chest and arms, as well as the back and legs, were frequently painful. Vertigo was not an uncommon precursor of the attack, and, in some instances, it was ushered in with many of the symptoms of apoplexy. Sometimes it had much of an inflammatory character at the commencement, which, however, was transitory. The cerebral excitement was, nevertheless, often considerable, accompanied with suffused face, intolerance of light, and a glassy appearance of the eyes. Yet these symptoms usually subsided with the remission of the paroxysm, or yielded to very moderate plans of treatment. In young people and children, however, the digestive organs were most affected, as evinced by pain and tension of the abdomen, and irritability of the stomach.

The heat of the skin ranged from 97 to 102°, and seldom rose higher; the pulse varying from 90 to 120, and, unless during an aggravation of the paroxysm, was usually weak. The tongue became dark-coloured as the fever advanced: often, however, the papillae were elevated and seen through the fur. When this was the case, the edges were redder than usual; sometimes, also, it was chapped and tremulous. The evacuations were in general

* Below the Old Mill, Liverpool-street, Collins-street, the neighbourhood of the Post-office, Wellington-bridge, &c.

dark and foetid, even after considerable purging. The urine, without any crisis, often deposited a lateritious sediment, and profuse perspirations occurred without affording any relief. In a few cases, a mottled appearance of the skin, or a rash resembling measles occurred about the eighth day and seemed to be critical. One of the most distressing symptoms was want of sleep, and the thirst was excessive. Pains resembling rheumatism frequently occurred to the people in the female penitentiary, some of whom had typhus nictism. An ephemera, or a fever of a day or two's duration, was another form of the epidemic, particularly during its decline.

In seven or eight cases, the fever was cut short by an emetic and small doses of calomel, while in others it endured for twenty days. Remissions occurred in the morning, and were most obvious in children and young persons in whom the organs of nutrition were most affected. In the adults, the brain suffered most, and, upon the whole, the remissions were less marked, while the duration of the fever was longer. In some cases it degenerated into a species of hectic which lasted for several weeks—that is to say, the patient was troubled with no well-defined disease, but with constant distress, anxiety, weakness, and quick pulse. Even in these cases, however, some periodical aggravation of the symptoms might still be observed.

Bleeding was seldom beneficial in the treatment of these fevers, even in those cases which seemed most to require it; that is to say, such as were accompanied with severe pains and other symptoms of inflammation or congestion of the brain, the stomach, the liver, or the bowels. The antiphlogistic plan of treatment was otherwise required. Emetics given early were of great value, followed by purgative medicines, as the compound powder of jalap, calomel, and castor oil. The operation of these evacuates, in several cases appeared to cut short the fever, and in many others removed, or relieved pains of the head and belly, and very often of the limbs, while it diminished the heat of the surface. In short, restoration to health frequently followed the use of these means alone.

But when the fever had firmly fixed itself, emetics were of no avail, and, indeed, were often inadmissible, especially when the stomach was irritable, or that, or some other important organ was periodically affected with intense pain. In such cases, calomel was usually given in eight or ten grain doses with the happiest effects; and I do not recollect that in more than one instance salivation was produced by it. Given in this way, about once a day, it had in general a sedative operation—allayed pains of the stomach and vomiting, and had a manifest effect in tranquillizing or controlling the febrile excitement. Other practitioners gave calomel to affect the system, in doses of three grains every three or four hours, combining it sometimes with quinine and antimonials, and as they informed me, with uniform success. But I have reason to believe, that it was sometimes carried too far, that the disease was seldom much shortened by it, and that the subsequent debility was often considerable.

Cold applications to the head, and blisters at the back of the neck, or between the shoulders, were assiduously employed. When the skin was dry, and the heat of the surface above the healthy standard, the cold affusion; but tepid ablutions with vinegar and water were more generally useful. Fomentations to the legs and feet relieved head-ache and procured sleep, even after much watchfulness and anxiety. When a well-marked remission of the fever occurred, the cautious exhibition of quinine or bark was immediately begun: wine in small quantities, or bottled ale or porter, allowed.

Slight traces of the fever might often be detected for two or three weeks after what is termed convalescence; and in a few instances, relapses occurred both when calomel had and had not been employed. Slight paralysis, or a sense of weakness or dragging of one leg, was not an uncommon sequela in children, but it generally went off in a few days.

Fever was again very prevalent in the summer and autumn of 1832. The attack was generally preceded by slight diarrhoea, which was often neglected. In a few days the head became heavy and painful; loss of appetite, giddiness, and vertigo, then followed. The tongue, at first, was usually covered with a slight mucous fur, which soon thickened, became very tenacious, and assumed the appearance of white paint, which afterwards changed to brown and black. Fifty-eight cases of fever, three of ordinary cholera, and twenty-three of diarrhoea, occurred at the Female Penitentiary during the autumn. In some instances, as in 1831, the fever was ushered in by a spurious attack of apoplexy (a mode of ingress which is said to be frequently observed of the fevers of Italy), and seemed occasionally to consist of a single

paroxysm: others assumed the continued form, but none proved fatal. The chloride of lime was given in some of these cases, *vice* calomel, and apparently with advantage.

LEAVES FROM THE DIARY OF A PARISH DOCTOR.

BY THEOPHILUS PROBE, ESQ.

No. VIII.

(Continued from page 18.)

SOME years ago a particular friend of ours settled in practice. He was a young man, possessing considerable talents, was highly educated, and was the son of very worthy parents, whose aim had been not only to advance him in intellectual attainments, but to give him right views of things, and impress him with a high standard of religious and moral excellence. He had distinguished himself at the anatomical and medical schools, and had carried away some of their first prizes. To those who entertain a notion that provincial surgeons must necessarily be an inferior class, we might with safety present this young man as a specimen to contradict such notions—yet he was not fated to shine amongst the constellations—like the humble violet, he was doomed to crouch unseen, and cast his odours on the “desert air.” He located in a village. The distance of his scene of labours from our own home did not exceed ten miles, and with that modesty which is the ordinary concomitant of genius, he asked us in case of any emergency if we would lend him a helping hand. Of course we complied with great readiness, assuring him that it would be to us always a pleasure to do him an act of kindness, whenever therefore he found a second opinion necessary, and he thought ours of any worth, not to fail to send to us. Shortly after he settled, he had a severe case of fractured thigh, and as it happened to be his first essay in that neighbourhood in this branch of his profession, he sought our opinion more to satisfy others than himself.

We found everything to praise in his management of the case, and augured, as the result proved—a capital recovery. On our return to his house we found a bachelor's dinner provided, and while we comfortably enjoyed his hospitality, we entered fully into his prospects.

We learned that he had contracted for a parochial district, and ascertained that the “Board” as usual had been most mean and parsimonious in their arrangements. They had cut him down so closely that it was utterly out of his power to earn a single penny by the appointment. Of course he was obliged to keep a horse, indeed it was a question whether one horse would suffice, for the circle of the district was thirty miles, and the extreme points twelve or thirteen. The population of two or three of his parishes was very large, and the bulk of the inhabitants were labouring people—there was no manufactory, the district being wholly agricultural. He was obliged to keep a groom, and for this *luxury* he must pay tax. Happily for him the blessed *tax on income* did not then exist.—To tax his income would have been a refinement in legislation, marvellously interesting, and some would say, impossible. Poo! nothing is impossible to cunning assistant commissioners. We live in times wondrously enlightened, for these gentry know our incomes better than we ourselves, and will bore us into a belief that our earnings are upwards of £150 clear, when we ourselves wonder how we are to pay our Christmas bills. We know men at this moment who are paying this odious tax, rather than be worried before a bench of magistrates, by a brutal commissioner, and we knew too it is a struggle with them to make both ends meet, live as carefully, and as cautiously as they will. Happy country, where men are compelled to work without income, and yet have to pay for it!

Our young friend was communicative, and opened his heart freely to us; but his sorest feelings were against the “Board,” for their really shocking parsimony—he lost his temper and his principles too while speaking of it, and in a paroxysm of anger he uttered this sad remark.—“I will take — care the druggist shall not have my profits.” We were startled, and fixing our eyes upon him, with earnestness we thus addressed him:—

“Dear friend, we have known you from childhood, your friends have been our friends—we esteem them, we reverence them, and we love you. Now listen: you are not without principle—you are not without a high sense of duty—you are not without a belief in man's responsibility,—his responsibility, not to man, but to God. We see the drift of your observation, and are concerned that you should forget for a moment the claims of those who would be victimized by your resolve, had you the heart to carry it out. Pause awhile, ‘the Board of Guardians’ hold with you a

very inferior position, compared with those who are the immediate objects of your professional service. The Board has offered a very unremunerative sum to you for the onerous duties they expect you to perform, nevertheless you have accepted this office, have contracted to receive their pay, and the question now is, not between them and you, but between your conscience and your God. No, dear friend, it is the poor and miserable—those who are innocent of the wrong you suffer, but who would if they could remedy that wrong—these are the objects upon which you are called to exercise your skill and judgment, and who look for your aid in affliction, as a blessed means to assuage their sorrows. And would you for any earthly sacrifice withhold the means? Would you add to the blight which has already fallen upon them, by even an act of omission, remembering that in the sight of God the sin of omission is equal to that of commission. 'The omission of good is the commission of evil.' We agree with you, according to your present arrangements, you cannot do justice without sacrifice, but you had a motive, otherwise, as a sensible man, you would not have accepted the contract—a contract which on the very face of it must involve you in expense, in trouble, anxiety, and labour. Well, then, to this motive you must sacrifice as to Moloch. Your talents, your time, your money must be cast upon the altar; and if, by the sacrifice of these, you can be an instrument of good to one of God's creatures, give Him the blessing that He has made you that instrument, for it is a high honour. Sir, Sir, we are responsible agents. He who searches the heart will hold us accountable. The God that made us—the high, the unseen, the glorious, the incomprehensible Deity, 'in whom we live, move, and have our being'—will demand of us at the last day an account of our stewardship, be it what it may; and if, from one of our poorest patients, we withhold the means which He has entrusted in our hands and given us skill to use, what will be our position when summoned before His awful presence?"

"What you say, sir," he replied, "is true and just; but it is hard to labour and yet lose."

"It is hard—it is cruel—it is brutal; but lose you must: better to lose wealth than character; better to be a beggar in the exercise of virtue, than a prince in the exercise of vice."

The young man replied—"Sir, you have taught me a lesson, and I thank you for it; you have given me new views, new thoughts, new feelings. Come what will, my duty shall be performed."

"That's well, one more word and we have done. Secure the blessings of the poor, it is the first step to confidence in the wealthy."

We took our leave, happy in the conviction "we had spoken a word in season."

We exhibit this case, recorded with care in our diary, to shew the evil which must result from the practice of making parish contracts to medical men below the standard of decent remuneration. What folly to suppose anything can be well done which involves a sacrifice, and not a reward, and of what base spirits must men be composed who can coolly and deliberately demand from another, that which they will never do themselves. Ask the butcher, the baker, the tailor, the miller, if they will separately bargain to supply their commodities at a loss, whether they will furnish to the workhouses or the parishes, to the pauper population, their goods at a price below what would pay them. They might in this case be content with smaller profits than they usually obtain, but surely they would not knowingly contract without some prospect of gain. Men are not such dolts and idiots as to do it. Why then is the enlightened and really learned medical practitioner to be placed in a position below them? Is that capital which has been expended in fitting him for high and exalted duties to return him nothing? Surely this condition of things must not, cannot last. Is it fair to require of men that they should possess this qualification and that qualification, to acquire which demands perhaps all the worldly wealth they possess, and then, when appointed to situations requiring the exercise of that skill which they have purchased, to screw them down in their contracts, so that they cannot move in the right direction without injury. We are quite convinced that the practitioner alluded to above would sacrifice considerably by his engagement, if in the demands for his provisional services, he furnished such appliances, as he was in duty bound to do. His first impressions, with simply worldly considerations, would have led him into great sin. He would have withheld the means of cure, because the money paid to him was inadequate to purchase them. He considered, as many we fear even now do, that the contract was a mere speculation, one out of which he must obtain profit, and meant to "cut his coat according to his cloth." With him it was "diamond cut diamond," and he fully meant as far as the "Board" was concerned, to give a "quid for the quo." Alas! he thought not of

the high moral claims which his contract involved; he reflected not, that the real recipients were not the gentlemen so graphically described by Mr. Bumble, who wear "white waistcoats and go to heaven in strong oak coffins with gilt nails;" but the wretched, half-fed, squalid, and cadaverous-looking mortals, who, although they have God's impress, know but little of the blessings which He so bountifully bestows on others. Those who, whether by their own improvidence or the oppression and cruelty of man, are reduced to dependence, and sue for bread that they may still drag on a miserable existence; who live in hovels, or shiver in streets, or rot in the slums of cities, or are imprisoned within the walls of Union-houses. No; he reflected not on these; and the world, perhaps, in its bitterness, may say—Why should he? but the world, in its wisdom, is blind to the spirit that is in it; and laws framed upon that wisdom alone will always grate upon their pivots, because they are unsound.

Our friend had real principle at heart, but there was a film over his true vision; it was removed, and he saw. Can we say this for every member of our profession? We are not inclined to "foul our own nest;" we are indisposed to cast a doubt upon the purity of other men's conduct; but this we know, that in half the Unions in this kingdom, the payment to the medical officer is so small, that justice cannot be done to the poor, without great and grievous sacrifices on the part of the hard-worked doctor.

We believe, however, there are many—and towards these we feel our hearts yearn—who withhold nothing from their poor patients which may do them good. These men live in hopes of better times. They trust Government will see their claims, and redress them. Year after year they continue to do their duty—year after year they find themselves minus; but they are noble in adversity. The pale debilitated patient needs quinine, and they administer it; he wants food beyond what is granted him by the authorities, and food is given, if it be only the broth in which their mutton has been boiled. We have had the honour of acquaintance with men of this class, and we could tell tales of their virtues, at which, perhaps, the selfish might smile contemptuously; but we smile approvingly, and say, "Go on in your noble and exalted career; if the world think not of you, we believe Heaven does. God's blessing be upon you, He will prosper the well doer."

(To be continued.)

THE PHILOSOPHICAL GAZETTE.

HISTOLOGICAL OBSERVATIONS.

By A. KÖLLIKER.

1. *Fat-cells*.—Although most histologists have assumed that the fat-cells of adults are without nuclei, Professor Kölliker states that he has observed them so frequently as to regard them as of constant occurrence. His observations have afforded him the following results:—That the fat of lean individuals consists of lobules of an intensely yellow, yellowish-red, or brown colour. These consist of cells containing serum and a greater or less globule of yellow fat. The cells have all consistent nuclei of 0.003–0.004" in size, which are frequently furnished with a nucleolus. There are, moreover, fat-cells which contain only serum, mixed with the former, or deposited in pale gelatinous cellular tissue, but these cells have also nuclei. The same is the case with the fat-cells in anasarca, which usually contain serum and but little or no fat; and a similar phenomenon has been observed in the fat-cells of the hyperemic medulla of the bones, as noticed by Hassé in rheumatism. The lowest layers of the *tunica dartos* contain, also, rows of small, pale, or granulated fat-cells having nuclei, and these are regarded by Professor Kölliker as lower developed stages of fatty cellular formation. The normal fat-cells of adults do not, however exhibit any visible nuclei; yet, when we consider that all fat-cells in the embryo contain nuclei, and that the slightly developed fat-cells of the scrotum exhibit nuclei, and lastly, that where the fat disappears in fully developed fat-cells, in consequence of emaciation or dropsy, nuclei are always made apparent, we can scarcely doubt that they likewise exist in all normal fat-cells.

2. *Division and anastomosis of the primitive bundles of the transverse striped muscles*.—It was formerly believed that the primitive muscular bundles constantly run in a straight direction, without dividing or anastomosing. Such, however, is not the case; for Professor Kölliker, in conjunction with Dr. Corti, found the reverse, not only in invertebrate animals but also in the human heart, and in the heart of many of the vertebrata. In man, and in the mammalia, they are extremely numerous and

delicate, and usually form short transverse or oblique branches, of inferior strength, passing between parallel bundles. They do not appear to occur in any other part of the human body than the heart, although they are met with elsewhere in the lower animals. It is worthy of remark that Leeuwenhoek saw and figured them from the heart of several animals, although his observations on the subject have met with no further notice from later inquirers.

3. *Nerves and vessels in permanent, unossified cartilages.*—Professor Kölliker has observed numerous vessels passing from the perichondrium and anastomosing in the nasal cartilages of the ox and pig. In the calf these vessels were even accompanied with nerve-fibres. This observation is the only one of the kind made in reference to the unossified cartilages.

4. *Air in the medulla and cortex of the human hair.*—Professor Kölliker confirms the views of several other observers, that the medullary substance of the human hair constantly contains air, further adding, that he has found air to be contained in numerous, scattered, elongated pores in the cortical substance of light-coloured hair. The existence of such air vesicles may be readily proved by treating the hair with oil of turpentine, ether, or water, when the air will be expelled.

6. *On the fibrillæ of the areolar and muscular tissue.*—Professor Kölliker considers it fully proved that the fibrillæ of the areolar tissue and the muscles are not artificial products, or products originating after death, since he has observed perfectly distinct and beautiful fibrillæ on making a transverse section of muscles by the double knife, either on the living animal or immediately after death. He observed the same thing in reference to the tendons.

6. *Accidental formation of fatty and sudoriferous glands in the lung.*—Professors Kölliker and Vischow found, on examining a preparation, in the Würzburg Museum, of a lung with a cyst containing hair, that the formation of the wall of the cyst was perfectly analogous to that of the outer skin, exhibiting an epidermis, cutis with papillæ, panniculus adiposus, hairs in ordinarily constituted sacs, together with large sebaceous glands besides the normal sudoriferous glands. Kohlrausch has made a similar observation in reference to an ovarian cyst.—*Sieb u Köllik. Zeitschr. f. Zool.* 1850.

CORRESPONDENCE.

To the Editor of 'The Institute.'

SIR,—Whatever may be expedient, it is only equitable in all cases as to fact, to hear both sides.

How can the administration of a medicine, which demonstrates its action upon the organs affected, by the production of similar symptoms in healthy bodies, be weakness?

You should demonstrate the grounds upon which you are so perfectly satisfied of the misconception and ignorance.

You should show us your grounds for imputing fraud.

Proofs should be given of the arsenic, morphia, &c., having been given in such large doses.

Homœopaths are not the only people who employ inadequate assistants to dispense.

The fundamental principle is *similia similibus*, and not the division of the parts of the dose, but that mechanical comminution extends the acting surface of a body, cannot be denied.

The quantity of a body, and the degree of division of a body, are distinct things.

Hahnemann orders a minute quantity because he will not do mischief.

The sulphur which may be taken in peas and bread is taken in combination, and that which is in the bile is what is excreted after having done its work.

There is only one sort of science, and that is true.

The only legitimate practice is to cure the disease.

To conjure may require a great deal of diligent practice, and some people are no conjurers.

What truth can be more simple than this, that a drug which can produce a disorder in a healthy body, is the proper remedy for a similar disorder in an unhealthy one?

Mean intellects can, or cannot, as it may be, grasp either error or truth.

The having passed the demarcation between truth and error preventing a return is mere verbiage.

A man may be the dupe of the bullies of an old doctrine as well as of a new one, and the profits of impostors may be well known to some besides homœopaths.

Homœopathy, so called, may be put into three parts—

1st. The ascertaining the symptoms that are excited in a healthy body by the ingestion of any drug. *Mat. Med. Pur.*

2nd. The administration of that drug for the removal of similar symptoms in diseased bodies. *Homœopathy.*

3rd. The dose.

When Hahnemann began he used the ordinary doses, but finding that they did more than was wanted, by the production of new quantity or kind of disease, he gradually diminished them to their present mere normal existence, a great absurdity, for in the "Organon" he gives plenty of instances of the useful effects of appreciable doses. With infinitesimal doses I have nothing to do, and homœopathic pharmacy is totally unnecessary.

Homœopathy is to a drug what a rifle is to a ball, it drives it at once to the mark and that only.

The compound prescription is like a blunderbuss, it may hit the disease existing and set up others.

Suppose we were to say that a diseased part is in a state of debility, and that a well-chosen drug excites the part to its proper action, because its peculiar property is to act on that part pre-eminently?

As to ascertaining the precise actions of drugs in healthy bodies, no one can object to that.

T. J. GREEN.

Ivy Cottage, Peckham.

[We have inserted Mr. Green's letter, but the crowded state of our columns obliges us to delay our comments for a future number.—EDITOR.]

To the Editor of 'The Institute.'

SIR,—The following case, which I observe in the Parisian newspaper *La Patrie*, of the 13th instant, seems deserving of transfer to the pages of a Medical Journal, as shewing how easily the act of suicide, or even perhaps of murder may be committed, by means of pressure on the neck. Such fatal facility ought to increase the watchfulness of those who have suicidal patients under their charge, and to stimulate the ingenuity of medical jurists as to the diagnosis of death by mechanical obstruction of the jugulars.

"A man named S., of Arndy (Lower Pyrenees), aged fifty-eight years, destroyed himself on the 4th of this month. The kind of suicide he selected is singular enough. With his right thumb he pressed the right jugular so firmly as to occasion extravasation of blood on the brain, and consequent death. He had on several occasions previously declared his intention to kill himself."

There is a case cited by Beck, from Metzger, of a young officer being strangled in bed (query, in sleep?) by violent pressure with the thumb, only one small spot of discolouration being found. Here the murderer was a fellow-soldier, and probably used great force, though limited in the surface of application.

But in the instance I have quoted from *La Patrie*, it is difficult to believe, that if great force were needed to produce the fatal result, the sufferer himself would have been able to apply it; still less to continue it if not instantly effectual.

The well-known case given by Dr. Marshall Hall—I think, in one of his lectures, of a youth having killed himself by resting his neck upon a festoon of cord, to try how a criminal might have felt whom he had lately seen hanged, is one of the most remarkable on record, as shewing what slight means may produce strangulation; but the French instance appears to me still more striking.

Your most obedient servant,

F. A. B. BONNEY.

January, 1851.

MEDICAL INTELLIGENCE.

EPIDEMIOLOGICAL SOCIETY.

January 6, 1851.

Dr. Babington, President, in the Chair.

THE INFECTIOUS NATURE OF CHOLERA.*

The reading of Dr. Bryson's paper on the infectious nature of cholera was completed at this meeting.

The author proceeded to inquire into the question, as to the spread of the disease by a specific animal poison, emanating from the human body, by comparing its evolution and spread with the evolution and spread of other infectious epidemics, the similarity

* Concluded from p. 234, vol. i.

of all the principal phenomena of which, he considered to be at least, very remarkable. In illustration of his views, he mentioned the outbreak of small-pox in 1835 in the island of St. Mary, on the banks of the Gambia; the inhabitants not being protected by vaccination, were, he said, in a position similar to that of the inhabitants of these islands as regarded cholera. Precautions were taken to prevent the spread of the disease, and for some time they seemed to be successful. At last a case occurred in a hut, and others soon in the neighbourhood. A few weeks afterwards small-pox showed itself in a village a few miles up the river, with which there had been constant communication by canoes. After an equal delay, the disease broke out in other villages, and afterwards in all the villages seated on the creeks and tributaries of the main stream, some escaping for a time, as in cholera, but suffering afterwards, and others escaping altogether. The epidemic, however, continued to spread till all traces of it were lost among the tribes in the far interior. The author was of opinion that the laws governing the spread of cholera throughout Europe, were, if not identical with, at least similar to those which governed the progress of small-pox in this outbreak. Direct proof of infectious communication, unaffected by local causes capable of producing the epidemic, it is difficult to obtain: and facts bearing on this point, may be, and are, by different reasoners, explained according to their own views, but Dr. Bryson thought that the appearance of the disease at Noss after the arrival of the fishing vessel from Dieppe, and the seizure of the attendant on the trampster in Chatham workhouse, were facts difficult to controvert, although the eruption of the disease in both these instances so soon after exposure to a presumed infectious source, might, no doubt, be set down as merely coincidental; still, so frequently has it happened that these so-called coincidental eruptions of cholera have followed the introduction of one or more cases into a healthy locality, that it is clearly evident we must hereafter attempt to explain them by other and more certain modes than those which appertain to the doctrines of chance.

The report furnished by Mr. Grieve, of Frazerburgh, respecting the cholera in the fishing villages in Cairnbulg and Inverloch, shows that, after many cases of diarrhoea had occurred in those villages—a disease usually prevalent there in that season—none of the sufferers from which were afterwards attacked with cholera, the epidemic broke out in both villages, after the arrival of two fishing boats, one belonging to each, which had loaded at Montrose, where cholera was raging, the crews of both having landed and wandered about the town. Prior to reaching Cairnbulg, one of the crew belonging to its boat was attacked, and died in fourteen hours, the symptoms being those of cholera. Several others of the crews were labouring under serious diarrhoea. The first case occurred in Inverloch (three or four days after the arrival of the boats), the sufferer being the father of one of the crew, and having been employed in unloading the boat. Two others of the same family were next attacked, and, meanwhile, cases occurred in Cairnbulg, also among persons who had been similarly employed. A few days passed away without additional cases, and then others, the relatives and friends of the first sufferers, were also seized with the disease. In Inverloch, the first case was the father of a family, the second, his wife, the third, a daughter living with her parents, the fourth, a daughter married, and living in a different house, who had attended her parents during their illness, the fifth, the husband of the latter, and the sixth, his mother. Other cases also occurred, in which there was not any proof of inter-communication. The sanitary condition of both villages is very bad; they lie low, and are damp; stagnant pools of water, no drainage, dunghills near the doors, consisting of fish refuse, with sea-ware, mark their state. A portion of Cairnbulg is rather higher and drier than the rest, and there the first cases occurred. There were sixteen cases during the first fortnight in the two villages, of which thirteen died, and three recovered; *i.e.* four deaths and one recovery in Cairnbulg, and nine deaths and two recoveries in Inverloch. The number of cases of diarrhoea could not be ascertained.

According to Dr. Jamieson, of Peterhead, the first case in Boddam occurred in a married woman, who had not been exposed to infection. The second was her son, who had attended on her; after which the disease spread rapidly through the village, but the attacks were almost exclusively confined to near relatives of the first case, who had been exposed to infection while attending the sick. Dr. Bryson remarked on these reports, that it is possible that in these three villages the eruption of the disease may have occurred coincidentally with its introduction, but it is not probable. Additional and stronger evidence, Dr. Bryson said, was found in the progress of the disease in the *Havering* convict-ship, and the *Apollo* troop-ship, such as could not be explained away. The *Havering* left Deptford on the 21st of

June, 1849, with fifty soldiers from Chatham, and a crew of sixty seamen. On the 26th off Start Point, cholera broke out among the soldiers, and two days later among the sailors. Of the 110 men on board, 28 were attacked with cholera or diarrhoea in eleven days. Dr. Bryson held that the soldier who was first attacked brought in him the germs of the disease, which were subsequently developed after the period of incubation, then reproduced, and propagated through a succession of cases, until every person in the vessel exposed to their influence, and susceptible of the disease, had been attacked. The ship was new, and thoroughly clean in all her compartments.

The *Apollo* troop-ship left Spithead on the 4th of June, 1849, arriving in the Cove of Cork on the 7th. A few days after, 513 men, 43 women, and 40 children, belonging to the 59th regiment, destined for Hong Kong, were embarked, and the vessel sailed on the 17th. Prior to these cases of cholera had occurred in the barracks where the soldiers had been located, and also in the neighbourhood. On the 18th there was a very bad case of the disease, which soon terminated fatally. No other case occurred till the 26th; the woman recovered. The third case, that of a soldier, was on the 29th; the man died. The vessel had then reached Madeira, but not being allowed to communicate with the island, soon proceeded on her voyage. The next case occurred on the 2nd July, at Teneriffe, where pratique was also refused. After this single cases occurred daily for a few days, all recovering; those on the 16th and 18th were fatal. On the 19th the disease was greatly aggravated, and extended to the crew; on that day there were six cases, three sailors and three soldiers, two of each dying. Up to the 5th of August, there had been thirty-two cases, sixteen dying, and sixteen recovering. Two days afterwards the *Apollo* was at Rio de Janeiro, and soon after sailed for Isla Grande, sixty miles to the westward, when the troops and the sick, the latter seventy two in number, were landed. The sick were placed in a temporary hospital. After this, there were not any fresh cases, but diarrhoea was very prevalent, and sometimes very severe. The medical officers of the soldiers and of the ship, attributed the outbreak of the disease, not to any cause in the vessel herself, but to the fact that the soldiers came from an infected district, to their crowded state, and to bad ventilation, thus rendering them more susceptible to a morbid influence. The vessel itself was perfectly sweet. Dr. Bryson attributed the endemic to a personal cause, introduced and propagated amongst her living cargo; and he supported his opinion by stating, that the sailors were berthed on a deck above that on which the soldiers were located; the lower deck being ventilated by tubes, which opened into the upper deck, but were not carried above it. These tubes were kept closed until two days before cholera broke out among the seamen; and the greater number of cases of the disease among the latter were amongst the men belonging to the messes close to the apertures of these tubes, or to the main hatchway, by which the impure air also escaped; thus showing, he said, one of two things, either that the disease was communicated from those on the lower deck, to those on the upper, by a personal virus, or that the impure air from the lower deck, so greatly impaired the health of the men breathing it, as to render them more susceptible to the influence of an unknown exciting cause, hovering within or around the ship. The latter influence the author altogether abnegated. He said it is hardly possible we shall ever obtain more conclusive evidence of the propagation of any disease by a specific infection arising from the human frame.

From these and other similar facts, the author drew the following deductions:—

1st. That cholera, like small-pox, measles, scarlatina, and yellow fever, originates spontaneously, but whether from causes internal or external to the body, there are no means of ascertaining.

2nd. It spreads epidemically only by an infectious principle, which is generated and evolved to a greater or less extent in every case, whether or not occurring periodically, the virulence of the poison being in a direct ratio with the amount of morbid action.

3rd. That the exciting virus may be conveyed by the atmosphere to the extent of several miles, if not further; but in contact with inanimate substances it may be conveyed to the distance of several hundred miles. Still the spread of the disease may generally be prevented by judicious quarantine restrictions, and its virulence may be greatly mitigated by cleanliness, ventilation, and an abundance of wholesome food.

MEDICAL SOCIETY OF LONDON.

January 4th, 1851.

Dr. J. R. BENNETT, President, in the Chair.

DISCUSSION ON MR. HANCOCK'S PAPER ON INTERNAL STRANGULATED HERNIA.

(Continued from page 43, vol. ii.)

Mr. Druitt was glad that the author had laid so much stress on the necessity for accuracy of diagnosis, and had laid down certain points which distinguish the cases described in the paper from those with which they are liable to be confounded. These cases are of more frequent occurrence than is generally supposed. He had seen a case some short time ago, which had been subjected to the usual routine treatment; after death, the cause of the disease was found to be the strangulation of a knuckle of intestine by a narrow band attached to the uterus. There are many difficulties in the way of this subject; one is, that strangulation may exist for some time before palpable signs of it become evident. A certain degree of obstruction may be present, but it is not until the bowels are distended by fæces, or flatus in the neighbourhood of the stricture, that this obstruction becomes the cause of strangulation. Nature sets up stercoraceous vomiting as a last resource, and if, instead of pouring in gruel and other matters, we could diminish the quantity already in the bowels, we should afford more relief than by any other proceeding except the operation. There is an indescribable want of congruity in the symptoms: they begin as inflammation, but do not go on as such; and inflammation may be removed, but the symptoms of obstruction continue. There is a certain something in the countenance which is pathognomonic: he (Mr. D.) knew nothing like it, except the expression of countenance consequent on taking arsenic.

Mr. Wade had seen two or three cases of internal strangulation which he would briefly describe. There is scarcely any question in surgery of greater interest than this. The surgeon is called to see a patient, who, apparently, must die, and the question is, whether by a happy boldness he can save life. There is a great obscurity in these cases: there is sometimes a small swelling, and occasionally none at all. Some years ago, he (Mr. W.) was sent for to see a little boy five years old, a dispensary patient, who was apparently dying. The abdomen was much swollen, and he was lying with his legs drawn up. The boy had been subject to constipation for two or three years, and had been suffering from pain in the abdomen for some weeks previously. The day before Mr. Wade saw him he was trundling his hoop in the park, when he was seized with acute pain all over the abdomen; he returned home, and vomiting then set up, and continued until he (Mr. W.) was called in. After some time the pain gradually subsided, but considerable uneasiness continued, and was complained of on the slightest pressure. The case ended fatally, and the *post mortem* examination showed that four or five convolutions of the ileum were quite black. There was great difficulty in discovering the seat of the strangulation; but it was afterwards found to have been caused by the diverticulum having contracted an union with a portion of the mesentery, thus forming a loop, through which the intestines had passed, and had then been twisted on each other. He (Mr. W.) believed that this state of parts had existed for weeks, and that the exercise with the hoop had forced down more of the bowels, and induced an acute attack. He questioned much whether, in this case, any surgeon if he had seen the patient early, would have ventured to operate, on account of the evidences of acute inflammation existing. Some time ago he had seen a woman, 60 years of age, who presented symptoms of acute obstruction. In this case also it was a question as to the propriety of operating. There was not any tension or tenderness of the abdomen; the pain was very intense, occurring every hour or half-hour in paroxysms. He (Mr. W.) judged this was a case of internal stricture in some part of the canal; there was not any stricture of the rectum, nor could he detect any tenderness in any particular part. He could not venture to recommend the operation in this case, constipation having existed for four or five years; although no stricture could be discovered in the rectum, it was not impossible one might exist higher up. There were not any signs of inflammation, the patient dying from exhaustion. On examination after death, there was found a stricture of the right portion of the transverse arch of the colon. There was another case—the particulars of which he had published years ago—that of an old gentleman 73 years of age, who had been subject to double inguinal hernia for thirty years, but who had not experienced any difficulty in returning it, until the morning on which he (Mr. W.) was sent for. After having passed a stool, he had a slight darting pain in the right inguinal region, without tenderness or fulness in either of the rings. The patient

was in a state of great collapse. On careful consideration, he (Mr. W.) came to the conclusion, that strangulation existed in the neck of one of the sacs, the contents of which had probably been returned *en masse*. The next evening the pulse was very low, and intermitting; the patient much exhausted. It was then proposed to open the right inguinal canal, which, having been done, the intestine was found in a state of strangulation. The bands were divided, and the bowel set free; the patient was very low for some time, but ultimately recovered.

Mr. Gay said, that the subject brought before them by Mr. Hancock's excellent paper, was one of the most interesting and important connected with surgery; and it is to be hoped, that in its revival, after the lapse of a century, it will not be allowed to drop until the profession shall have arrived at clearer and more definite notions respecting it. He could not but think with Mr. Hancock, that the members of the profession were bound to publish all cases, successful or otherwise, which would throw any light upon the subject of internal strangulation and its treatment; and this conviction prompted him to address the members on this occasion. On Thursday week last, Mr. Gay was requested, with Mr. Burchell, of Shoreditch, an excellent and intelligent surgeon, to see a man aged 42, who was suffering from severe pain occurring in paroxysms in the left iliac region, lancinating towards the opposite side, stercoraceous vomiting, constipation, hicough, great debility, with a countenance wan and anxious, and bedewed with drops of cold perspiration. He had been subjected for three or four years to attacks of constipation, with pain in the same region, the first attack, as he thought, having been brought on by lifting a heavy bureau. The symptoms commenced as usual, on the Saturday previous, and became rapidly more severe, notwithstanding the use of remedies, which, before, had been apparently successful in subduing them. The vomited matter became stercoraceous on the morning of the day before the Wednesday. The abdomen was slightly tender generally, but intensely so in the particular seat of pain already mentioned; rather tense, but not particularly tumid; dull on percussion over the site of the small intestines and cæcum, and resonant elsewhere. Under these circumstances, and as the man was evidently about to sink, Mr. Gay mentioned as the only resource the operation of abdominal section, mis-called gastrotomy. To this proposal the patient and his wife immediately acceded, and it was performed. An incision nearly six inches in length was made along the linea alba into the abdominal cavity. A large portion of the ileum, quite empty, and paler than the rest of the intestine, was found constricted by the vermiform process of the cæcum; it was drawn out of its situation, the intestines carefully replaced, and the wound sown up. The portion of the intestine above the stricture was found, however, rapidly proceeding to disorganisation, if gangrene had not really commenced in several patches. In this operation Mr. Gay was ably assisted by Messrs. Coulson, Childs, Burchell and Lane. The man was relieved of his pain, but he had no evacuation of his bowels, and he sunk twenty-two hours and a half after the operation. An examination was made the next day by Dr. Peacock. The small intestine above the constriction was found gangrenous and almost pulpy. The channel of the intestinal tube had become completely restored by the operation, but at the coecal extremity, the ileum for three inches had obviously suffered considerable injury from constriction; the diameter of the tube was somewhat lessened, and its coats thickened. The constricting ring (situated on the right side of the abdomen) was formed by the vermiform process in front, a band of adventitious membrane passing between the cæcum and ileum behind, and the side of the cæcum laterally. The other organs were healthy. Mr. Gay thought, as far as the operation was concerned, it was perfectly successful. He (Mr. Gay) further said that the first question in considering these operations, was whether a surgeon was justified in opening the abdomen and exposing the intestines to so much handling as was necessary. It must be remembered, in reply, that it was only undertaken for diseases that had every appearance of being fatal; and that the mere opening of the abdomen was shown by operations on ovarian tumours to be unattended with any great amount of risk—that, in fact, persons constantly recovered from such a procedure. The next question was, what are the symptoms by which such cases as were fitted for the operation were to be distinguished? He thought that those cases in which strangulation or constriction of a portion of bowel, from its getting into a ring abnormally formed, were certainly fitted; and these he (Mr. Gay) thought might be made out by careful attention to the circumstances of the case. First, there should be undoubted evidence of strangulation or obstruction high up in the bowels, and the cause might be cleared up by the history of the patient's complaint. In all the well-authenticated cases which he had brought together there had been attacks of intestinal obstruction for

some time—in some instances for some years—before death. In the present case the patient had had attacks of constipation of considerable severity, lasting two or three days each time, attended with pain and dullness, and then subsiding, but not without reducing the patient's strength most materially. These attacks could be explained by a knuckle of intestine getting into a ring formed either in the mesentery or by the vermiform process, united to some contiguous viscus or part, or by an adventitious band, but not so much of it that it could not be disengaged by the natural efforts of the bowels, and probably by the efforts during sickness. It is not until so large a portion of intestine becomes so involved as to be incapable of being returned by natural exertions, that the case assumes a character of more permanent and fatal severity; and in this Mr. Gay thought he was borne out by the fact that in his own case, that of Mr. Hancock, and others related, the quantity of intestine found down was very great—from twelve to thirty inches or more. From obstructions low down in the bowels, such as stricture in the rectum, these cases could be distinguished by the gradual manner in which the symptoms in the latter cases approached, by the want of that early sickness and the severity which characterized obstructions of the ileum, as well as by the urine being secreted in its normal quantity. With regard to involutions or invaginations, Mr. Gay could not at present express an opinion. What was the kind of operation? The local pain in Mr. Hancock's case, as well as in his own, was on one side of the body, whilst the seat of mischief was on the opposite. This was not, however, always the case. Still as there must be in all cases a doubt, Mr. Gay thought the safest plan would be to cut through the median line, as from that part the whole of the intestinal convolutions could be reached. Mr. Gay concluded by thinking that much is yet to be done in this branch of surgery.

Mr. Nunn remarked that Mr. Gay had alluded to an important fact, respecting the period when vomiting occurred in these cases. He had understood him to say, that the symptom was met with late in the disease, when the seat of the strangulation was low down in the bowels, and much earlier when it was high up. If these views were correct, they corroborated the statements made by Dr. Brenton, in the *Medical Gazette*. The persistence of the stercoraceous vomiting after the stricture had been removed, however, had not been explained. He did not understand whether Mr. Gay was, or was not of opinion, that in his case, the peristaltic action of the intestines was exhausted, so that, although the channel was restored, the proper course for the fæces could not be regained.

Mr. Dendy had had but little experience in cases of internal strangulation, but had seen several cases of obstruction from hernia, where there were adhesions of the gut to the sac—cases which presented all the symptoms of strangulation, differing only in degree. He held an opinion contrary to those who asserted that in these cases inflammation set in early; in Mr. Hancock's cases, the patients were able to walk about for some days after the disease had commenced, which they could not have done if there had been inflammation. With respect to the time when the operation should be performed, supposing the diagnosis clearly made out, analogy with external hernia, and all the known facts would cause surgeons not to hesitate in urging an early proceeding. The operation is certainly a formidable one, but it is more likely to be successful, if done early.

Mr. Canton drew the attention of the society to the cause of the frequency of internal strangulation in the neighbourhood of the inguinal rings, and considered that it was often to be traced to the effusion of lymph consequent upon a limited degree of inflammation, which arose from feculent impaction at some previous period of life, in the caput coli or sigmoid flexure. The deposit became converted into fibrous bands. In the cases of Messrs. Hancock and Gay he thought it not improbable that the temporary irritation produced by the lodgment of a foreign body, or a nodule of hardened feces in the extremity of the vermiform appendix had originated the lymph which tied this gut to the adjacent cæcum or ileum. An instance of internal strangulation was given, where, after the complete reduction of an oblique inguinal hernia, the patient died with a persistence of symptoms. The *post-mortem* examination showed that a large amount of small gut had passed through an opening formed by an adventitious band at the internal abdominal ring. This case was an instance, also, of constriction, terminating in death, without the production of peritonitis, the patient dying from the shock to the system. He (Mr. Canton) had seen a band, extending from the fundus uteri to the transverse colon, which most probably had been formed during pregnancy, constitute a noose for a portion of intestine. He next gave the particulars of a case, of the peculiar description mentioned by Mr. Druiitt, in which he performed an operation, assisted by Mr. Hancock, and where death verified the

diagnosis. The case, though unfortunate, was adduced on the principle advocated in the paper, viz., the necessity of giving publicity to such facts, even though they presented so unfavourable an aspect. The value of the symptom pain was spoken of, and he (Mr. Canton) considered that the cases of Mr. Hancock and Mr. Gay were good illustrations of the dependence to be placed on this "indication," for in one instance it was felt at the umbilicus, in the other on the left side, whilst in both the mischief existed in the right ileo-inguinal region; and it might be, additionally, remembered that disease of the rectum often caused pain in the situation of the umbilicus. Another point for consideration was, whether or not blood had been voided by stool, for its passage would most probably indicate an intus-susception. Even slight aids to diagnosis, in the midst of obscurity become valuable. After touching on other such auxiliaries, Mr. Canton considered the question as to the site to be selected for operation, and thought with Mr. Gay that, as a general rule, the linea alba was the more preferable; he referred to the case spoken of by Mr. Gay, as illustrating well this position. That gentleman had also made some pertinent remarks on the utility of maintaining a certain temperature in the apartment in which the patient was to be kept, who had had an exploratory incision made into his abdomen. The success of Mr. Value's cases of ovariectomy, Mr. Canton considered, would serve to fortify the value of this treatment. After the external incision had been made, it was advisable, at once, to commence a search for the contracted portion of gut, and to trace it onwards until its sudden enlargement was reached, when, at the point of junction the stricture would be found. Attention to this particular might obviate much injurious manipulation, would shorten the period of the gut's exposure to the air, and not only expedite, but facilitate the progress of the operation.

Dr. J. R. Bennett, in referring to an important point of diagnosis, remarked that it had been considered advisable to exclude cases of typhlo-enteritis. In these the diagnosis is comparatively easy, especially in the early stage, where there are distinct evidences of inflammation. Some cases had presented proof of the advantage attending early surgical interference. Dr. Bennett then referred to a case of Mr. Linneear's, which was subsequently operated on by Mr. Hilton. The man had had repeated attacks of constipation, &c., which had always left some uneasiness and hardness, with swelling in the left iliac fossa. In the last attack, the symptoms were more violent than on any previous occasion; but, after a time, the patient became somewhat better, relapsing soon afterwards, the hardness and swelling increasing, and extending over the whole abdomen. A blush of inflammation next showed itself externally, and a tumour formed, which Mr. Hilton laid open, giving issue to a large quantity of offensive matter. After death it was ascertained that the peritoneum had not opened, but a large cavity on the anterior part of the abdomen, communicating with the left iliac fossa, and with the intestines.

Mr. Peregrine considered that, in these cases, the chief difficulty consisted in determining the seat of the obstruction. He would wish to ask Mr. Hancock, whether he had derived any assistance from an external examination by the touch or sight, in detecting the direction of the coil of intestine. This had led to the discovery of the site of the obstruction in at least one case, and he (Mr. P.) fancied that in others, in the practice of some distinguished surgeons, a similar result had happened.

Mr. Hancock, in reply, stated that he had not derived any assistance in the diagnosis from that source. His object in bringing the paper before the society, was not solely to ascertain the propriety of an early operation, but also to elicit the treatment to be adopted previously. He was of opinion that, in cases as they have occurred of late, the fatal result was owing to both. Instead of soothing the intestine, measures were adopted which were calculated to increase the irritation, instead of overcoming the obstruction, for in these cases it is usual to employ calomel, turpentine, scammony, and other drastic purgatives; and the surgeon is not called in until all these drugs have been given, and the patient's life almost vomited out of him. Mr. Druiitt's observation respecting the pathognomonic appearance of the countenance was correct, but that sign was not always present; in one of his cases, the patient had a ruddy, healthy look. He (Mr. H.) did not lay so much stress on the degree of temperature of the room as some surgeons did, but he had no objection to it, if it could be carried out. Large portions of intestine have been exposed to the air for some time in operating on considerable hernia, and yet no harm has resulted. He had not alluded to it in detailing his cases, because he had not used it, it not being in his power. He agreed with Dr. Bennett in his remarks respecting typhlo-enteritis. He had brought before that society the case of

an old lady labouring under that disease; he had opened the abscess which formed, had evacuated a large quantity of putrid matter, and she recovered.

Dr. Bennett inquired of Mr. Hancock whether it had ever occurred to him to endeavour to release the strangulated gut by completely changing the position of the patient—by placing him in fact topsy-turvy?

Mr. Hancock replied in the negative.

January 11th, 1851.

NEW PREPARATION OF IRON.

DR. ROUTH exhibited to the Society two specimens of phosphate of iron dissolved in metabasic phosphoric acid—one in a solid, the other in a fluid state. The compound was prepared by adding as much phosphate of iron as the metabasic phosphoric acid in a boiling state would take up, and allowing it to cool. The proportions would be found, as nearly as possible, two of acid to one of the phosphate. The solution obtained is of a semi-transparent greenish or slaty hue. If exposed to the air for a day it hardened; but mixed with liquorice powder or flour, it could be made up at once into pills. The compound was soluble in any proportion of water, and free from any nauseous, inky taste. Dr. Routh had not analysed it, and could not assert whether it was simply a solution of the phosphate in the acid, or a new superphosphate that was formed. He had given it largely. It appeared to him to be better adapted for, and more speedy in bringing about a cure, than other preparations of iron, in some cases of anæmia and debility, brought on by venereal or other excesses, over-study, and other depressing diseases, in which there was a prevalence of nervous symptoms, and a large quantity of phosphates voided by the urine. It seemed to act on the same principle as the cod-liver oil, *i.e.*, as the latter might be considered to supply the amount of carbon necessary for combustion directly to the lungs, thereby checking the drain upon the system, and allowing it to rally from its hectic state; so he supposed the present remedy supplied directly to the brain the amount of phosphorus necessary, to the undue diminution of which the nervous disorder was probably owing. The medicine did not gripe or constipate. He gave it in doses of *j.* or *ij.* grains three times a day.

In answer to a question, Dr. Routh stated that he had obtained one specimen from Mr. Morson; but most of that he had employed, had been prepared by Mr. Greenish of New-street, Dorset-square.

(To be continued.)

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 14th, 1851.

S. SOLLY, Esq., F.R.S., Vice-President, in the Chair.

FIBROUS TUMOUR OF THE UTERUS IN CONJUNCTION WITH PREGNANCY.

By R. R. ROBINSON, Esq.

A WOMAN, aged 40, pregnant with her third child, was confined at four o'clock in the afternoon. The labour was in every respect natural, and the womb contracted well. Two hours afterwards she was seized with cold chills; upon being put to bed was sick and faint. When seen, five and a half hours afterwards, she was in a state of complete collapse. Fearing internal hæmorrhage and not being certain about the state of the uterus, the hand was introduced; the uterus was found empty, but flaccid. By cold, pressure, maintaining the hand in the uterus, brandy and laudanum, contraction of a feeble kind was produced, and also a somewhat improved condition of the system generally. She rallied a little, but never fairly got out of collapse. She lived ten days, and died apparently from atonic peritonitis. Upon dissection, the intestinal convolutions were of dark colour, being smeared with blood, and were united to each other and to the uterus by recent and easily separable adhesions. There were three pints of dark venous blood, without coagula, in the peritoneum, and the tumour, in size and shape like a placenta, attached to the fundus of the uterus. This was covered with peritoneum, a reflection from the uterus, which at the angle of reflection was lacerated to the extent of two inches. In his observations, the author alluded to the uniqueness of the case; to the structure, situation, and growth of the tumour; it seemed as if a malignant character had been implanted upon one originally fibrous; as regards situation, he thought had the woman not been pregnant, it was the most favourable, and would have produced little inconvenience. He thought, also, that the tumour, originally of small size, grew with the uterine development. He ascribed the laceration

to the tumour being entangled in the convolutions of the intestines, and consequently not following the uterine contractions so freely as was necessary, the peritoneum being thus put upon the stretch, and on the recurrence of pain giving way. He drew a contrast between this and another case of laceration of the peritoneum which occurred to him, which has been published, and in which death happened in the course of twelve hours, and thought the difference in the treatment adopted might have accounted for the difference of time at which death occurred; and in conclusion alluded to the fear of rupture of the peritoneum, as an additional reason for resorting to the induction of premature labour.

(To be continued.)

HARVEIAN SOCIETY.

January 16th, 1851.

THE CHARACTERISTIC PECULIARITIES, PATHOLOGY, AND TREATMENT OF RHEUMATISM, MORE PARTICULARLY AS IT IS FOUND PREVAILING WITHIN THE TROPICS.

DR. JAMES BIRD read a paper on the subject of rheumatism, in which he entered into a consideration of several points connected with the rheumatic diathesis, its paroxysmal progress, and local manifestation in particular organs; confining his observations, 1st, to leading varieties, to tropical rheumatism, and the points in which articular rheumatic inflammation differs from simple suppurative inflammation. 2nd. Origin of the rheumatic diathesis, nature of the paroxysmal fever accompanying articular rheumatism, and causes which produce them. 3rd. The general principles of treatment. Dr. Bird said, that tropical rheumatism presented two principal forms, the stheno-phlogistic or acute, and the astheno-cachexial or chronic. The former, in its attack upon particular tissues, shows a preference for the compound membranes of a mucous and serous kind; the latter affects the muscular and nervous tissues, and has much of a neuralgic character, accompanied by vitiated nutrition and wasting of the parts affected. The very acute variety, associated, as in Europe, with pericarditis or endo-carditis, is a form of the complaint seldom presented to observation in India; though cases, in which the ordinary symptoms of heat, pain, redness, and swelling of the joints, accompanied by fever, occur both among natives and Europeans. Such attacks usually happen among those inhabiting the colder, drier, and more elevated table-lands of that country; the astheno-cachectic varieties, associated with different forms of periostitis, having all the character of mercurial syphilitic cachexia, is peculiarly the produce of malarious districts. Several interesting cases of these different forms of rheumatism were given in illustration and proof that astheno-cachectic rheumatism, associated with arthritic periostitis, is a state of constitutional cachexia, more frequently developed among the natives of India than among Europeans after mercurial treatment. The proclivity of native constitutions to this form of disease, arose, Dr. Bird thought, from the more general use of non-azotized articles of diet by the natives than by Europeans, giving to the former less vital power of resistance to the destructive metamorphoses of the tissues, brought on by cold and abused courses of mercury. As cachexia advances in cases of this kind, attended by complication of rheumatic symptoms, the skin becomes harsh and dry, is covered with white scales or papular eruptions, having all the character of obstinate psora. The intimate sympathy existing between the skin and epithelial covering of the intestinal mucous surfaces, afforded an explanation of the occasional association of cutaneous eruptions, with derangements of the primary assimilation and intestinal mucous membranes, as observable in the different forms of arthritic complaints.

Dr. Bird next showed the intimate relation between milder degrees of the scorbutic diathesis, and forms of astheno-cachexial rheumatism, pointing out that the great and accurate observer, Sydenham, had long since described a species of rheumatism, resembling scurvy, in its capital symptoms, and requiring nearly the same method of cure, to which he appropriated the name of scorbutic rheumatism. Several cases of this kind were given in illustration, wherein lemon-juice, with an allowance of potatoes and fresh meat diet, were found to be of much service in aiding the other means of cure.

The graduated forms of rheumatism above described, derive more of their difference from constitutional causes of distinction, and the less or greater aberration of the blood from its normal state; and though the distinctions of the disease, according to its seat in various parts, were thought to afford less important grounds for opposite therapeutical principles and modes of treatment, than

the differences derived from constitutional causes, still the varieties founded on locality, were deemed of importance, as guides to practical results. The best description of such varieties, in Dr. Bird's opinion, is that adopted by M. Chomel:—1st. Articular rheumatism, or rheumatism of the joints; 2nd. Muscular rheumatism, or rheumatism of the voluntary muscles; and 3rd., Visceral rheumatism, or rheumatism of certain fibrous tissues, situated within the splanchnic cavities. The generality of cases belonging to the first form, as met with in the tropics, oftener present symptoms of the mild chronic variety, than of the intense articular rheumatism of European climates; and though attacks are generally ushered in by febrile symptoms; these symptoms are of less severity than in colder climates, and the disease is less mobile in character. Muscular rheumatism too, though observed in every part of the body, and usually more amenable to treatment, than cases of the articular form, is more frequently met with in the loins, and muscles of the limbs, than in any other part of the sarcous tissues. This is peculiarly a disease of malarious districts, being very prevalent among the men of native regiments, when located in such.

Dr. Bird then proceeded to inquire whether the phenomena of rheumatism were identical with those of inflammation, and the phlegmasiæ. Though rheumatism appears with all the phenomena of the latter, its local inflammations still possess a specific character, more symptomatic than idiopathic in nature, and manifesting in progress, that the symptoms proceed from a particular constitutional taint, which gives to them a character distinct from simple inflammation. Space does not admit of our entering into the differential diagnosis, given of these two separate forms of inflammation. Rheumatism generally presents quite as much of the character of the *neuroses*, as of the phlegmasiæ; and though evidence be not wanting to prove that acute articular rheumatism sometimes terminates in suppuration, and purulent effusions into the joints affected, still rheumatic inflammation differs from simple inflammation, inasmuch as it proceeds from a specific cause, and is associated with greater abnormal sensibility of the nerves. Regarding the origin of the rheumatic diathesis, rheumatism was considered the result of that pre-existing lesion of the assimilating and excretory organs of the body, which, on the application of cold, errors of diet, intoxication, malaria, and like exciting causes, gives rise to that abnormal change of the blood, which constitutes the rheumatic diathesis. Dr. Bird did not deny that occasionally cold and other causes might produce rheumatism in constitutions little or not at all disposed to the disease, though the reverse was usually the case: but in *all* the sudden or continued influence of damp, cold, malarious air, by producing a powerful impression on the skin and nervous system, might be set down as the first link in the chain of changes connected with the generation of *materies morbi* in the blood. The equilibrium of healthy nutrition was disturbed, the tissues ceased to appropriate true nutritive materials, the assimilating functions of the stomach and collatitious viscera were deranged, and the eliminating excretory action of the liver, skin, and kidneys was impaired or suspended, so as to admit of effete and imperfectly oxydized materials reverting into the circulating fluid. Rheumatic paroxysmal fever, which is of an irritative kind, was considered as a manifestation in different tissues of the rheumatic diathesis so generated.

The general principles of treatment were then noticed, and the indications thus summed up:—1st. To subdue constitutional irritation by narcotics and refrigerants:—2d. To eliminate from the system the retained choleic elements and other excrementitious matter of the blood, which render the urine acid, and occasion its lithic deposits:—3d. To restore the condition of normal nutrition by diet, iron, cod-liver oil, and tonics when the rheumatic symptoms are associated with cachexia:—4th. To subdue local symptoms of swelling and pain by leeching, cupping, and blisters, followed by anodyne applications, or local anæsthetics.

In order to fulfil the first indication, nitrate of potash, which diminishes the plasticity of the blood, combined with nitrous ether and other diuretics, will be found one of the most efficacious of remedies. Of the medicines best adapted to carry out the second indication of treatment, calomel with Dover's powder at bed-time, followed by a solution of purgative salts with an alkali and colchicum, will be found amongst the most useful. Citrate of iron with cod-liver oil and an animal or milk diet, will secure the fulfilment of the third indication; and attention to carrying out the fourth and last, will greatly secure the efficacy of constitutional means, and procure ease and comfort to patients afflicted by local symptoms.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, January 25, at 8 P.M.
MEDICAL CHIRURGICAL,	Tuesday, 28, at 8½ P.M.
ROYAL,	Thursday, do. 30, at 8½ P.M.
KING'S COLLEGE,	do. do. 30, at 7½ P.M.
[On Insanity. By T. Aldridge, M.D.]	
ROYAL INSTITUTION,	Friday, do. 31, at 8½ P.M.

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THE INSTITUTE.

LONDON, SATURDAY, JANUARY 25, 1851.

THE General Practitioners' Bill, prepared by the Council of the Institute of Medicine, Surgery, and Midwifery, on the great principles advocated by that body, and by the National Association with its 4,500 members, is an able, honest, and straightforward document. The medical press, friendly or hostile, has found very little in the Bill to criticise, to alter, or to amend. This augurs well for the success of the measure, which has been drawn up so as, if possible, to disarm opposition, while it embodies all the rights and privileges which the General Practitioners of this country have a right to expect, or ought to enjoy.

The Consulting Physicians have their own College, with such rights and privileges as they seem to be contented with.

The Consulting Surgeons have their College, with such rights and privileges as they have recently asked for, with a constituency of Fellows whom they hold up as the *élite* of their class; or who, by a purifying process, they have refined far above the common herd of members—the “ordinary-exigency” men.

But the General Practitioners—those never-failing servants of the public—who must be good physicians and good surgeons—though not consulting ones; who, in addition, must be dexterous obstetricians, accomplished chemists, and careful pharmacæutists, or they will have no chance of success in these days of knowledge and acquirement—these men who are, at least, eighteen-twentieths of the Profession, have no College or Institution which can be called their own. Their attainments are, in general, tested by at least two bodies, the College of Surgeons, and the Apothecaries' Society; yet in neither of these are they REPRESENTED, nor can they be said to be recognized by either of them. In addition to all this, many of this despised class have been examined at one or other of the Universities of this empire, and acquired medical degrees equal, if not superior, to numbers of those

held by the Fellows and Licentiates of the College of Physicians.

It is clear, then, that the General Practitioners of the present day are more highly and more extensively examined than any other members of the Profession; yet they have no College of their own in which they can meet and discuss their affairs; they are unrepresented in the whole of the present medical bodies; they have no control over the education and examination of their own class as exercised by the Colleges; and they are repudiated, despised, and opposed by the bodies which should protect and assist them.

It is, then, to remedy these long crying evils, that the Bill to incorporate the General Practitioners into a College of their own, has been brought into Parliament; and it will greatly depend on the energy and exertions used to obtain support for the measure, whether it shall pass into a law. There is only one principle in the Bill which can give rise to any doubt or misapprehension in the minds of the Profession, and that is comprehended in the "Reciprocity Clause." This has been so far misunderstood in some quarters, and objected to in others, that an alteration has been made in the original clause, so as to meet the suggestions and wishes of certain bodies; but these have not interfered with another principle of the Bill, viz., that of a high standard of qualification. The Bill, in the first instance, includes in the New College, without examination, every one who has the right to practice as a General Practitioner, in any part of the United Kingdom. This regards the past, but for the future, it is of the greatest importance that none should be admitted merely on the strength of his diploma, or degree, or license, unless these have been obtained *under curricula and examinations of as high a standard* as shall from time to time be required by the College of General Practitioners.

It would not be consistent with the public safety, that gentlemen possessing diplomas from any College whose examinations are confined to Anatomy and Surgery, to the exclusion of Medicine, Midwifery, Chemistry, &c., should be admitted, without further tests, to an *ad eundem* diploma in the contemplated Institution. Such gentlemen *might*, perchance, be fitted for the *extraordinary* exigencies of surgery, but would be most miserably deficient as regarded the ordinary duties of a Medical Practitioner. On the other hand, the curricula and examinations of certain of the Universities and Colleges in the United Kingdom, are amply sufficient to test the qualifications of those who intend to practise their profession generally, instead of partially—and the alumni of these bodies would be permitted to enter the new College without further examination, on paying the fees, and would thus acquire perfect reciprocity as regards privileges and practice.

One portion of the medical press, which professes great regard for the interests of General Practitioners, but which has deserted their cause at the hour of need, has laid hold of the clauses in the Bill relative to this subject, with the apparent intention of sowing discord, and producing distrust, by sneering at the sort of reciprocity which it will allow to the half examined members of one or two of the existing Medical Boards. Our wise contemporary is trying to blow hot and cold on this subject, and is anxious to uphold the interests of some of the examining bodies, at the expense of the public health.

But before he becomes so critical, he should at least be

accurate. Will it be believed, that in his haste to condemn that which he is evidently profoundly ignorant of, he actually quotes from the Bill the amended clause for the original one, and *vice versâ*! The arguments—if arguments they can be called—which he founds upon such accuracy, like the arms of Don Quixotte's windmill, only recoil upon his own head and break his own pate. The would-be friend of the General Practitioners also sneers at those gentlemen in general practice who have graduated at British Universities, and questions the value of a Scottish degree, on the principle, we suppose, of the 'Fox and the Grapes,' for he holds his own title from Heidelberg! Verily, our friend should leave the regulation of the General Practitioners to those who understand their true position.

We would not unnecessarily interfere with the rights and privileges of any examining Boards; but private interests must not be allowed longer to obstruct any measure which would so manifestly tend to advance the much higher interests of the community. We therefore repeat what we said in a recent number:—"In urging their just rights on members of the legislature, our medical brethren should remember that the principles of this Bill are:—

"1. The public good, by a high standard of qualification in every department of medical science and practice.

"2. The incorporation of gentlemen so educated and qualified for the service of the community, into a College of their own, on a free system of representation.

"3. *Full reciprocity of privileges throughout the kingdom, with other bodies whose members have been similarly educated and tested.*"

TESTIMONY OF THE INSANE.

A CASE of considerable interest, and of some nicety in Medical Jurisprudence, has recently been brought to the notice of our tribunals. An unfortunate inmate of Armstrong's Pauper Lunatic Asylum, at Peckham, died unexpectedly in December last, and upon examination his left arm and four of his ribs on the right side were found to be fractured. His keeper had made no report of any casualty having happened to him, and, in fact, denied all knowledge of how the deceased came by the injuries which caused his death. We do not, of course, desire to discuss the merits of an investigation which involves the most serious consequences to the party accused, and is still pending; but it cannot prejudice him to state, that the keeper's denial was not relied upon, and an inquiry took place before Mr. CARTER, the Coroner for the county of Surrey.

At this inquiry a difficulty arose, which Mr. CARTER had neither the legal knowledge nor the good sense to grapple with. It was clearly his duty, if once satisfied that there was reason to believe that the deceased had met his death by violence, to examine every witness who could give evidence of the circumstances, and to leave their final admissibility to be decided by the highest authorities—the Judges of the land. To Mr. CARTER, however, it appeared otherwise. With the exception of the keeper, who was under suspicion, and who had asserted his ignorance of everything relating to the transaction, no one could depose to the treatment of the deceased, but his fellow lunatics. The Jury was anxious that some or one of them should be examined, Mr. CARTER, however, refused to take this course, on the ground that a person declared by law to be lunatic, was by law an incompetent witness; and the Jury, in the absence of sufficient

evidence, arrived at the unsatisfactory verdict of "Man-slaughter against some person or persons unknown." We would here interpose this obvious comment, that if Mr. CARTER's view of the case were correct, the keepers of our pauper lunatic asylums might be guilty of the utmost brutality to their patients, with an impunity almost certain.

At this stage of the proceedings, however, the Commissioners in Lunacy interfered. The Coroner's Court had not performed its functions well, and the keeper was therefore by the direction of the Commissioners apprehended on Saturday last, and charged before Mr. Norton the magistrate, with the manslaughter of the deceased. Here the scene was entirely changed. The Counsel for the prosecution intimated his intention of calling one of the poor men from the infirmary where the deceased was kept, and who could speak to important facts. Accordingly, to use the language of the reporter, "RICHARD DONELLY, a red-faced funny little Irishman, mounted the witness box," and being questioned as to the nature of an oath, to which questioning (we again quote the reporter) "his answers were as lucid and satisfactory as could be given by the Bishop of London or Cardinal Wiseman," he was allowed to be sworn, and detailed a narrative, which upon the face of it, whatever be its value, seems clear and connected, and which elicited from the magistrate the compliment, that he as well as everybody who had heard it was convinced of its truth. The result is, that the keeper has been committed to take his trial at the ensuing Sessions of the Central Criminal Court.

With the guilt or innocence of the keeper, we at present have nothing to do. In the interests of that profession which we aim at worthily representing, it is indeed of the deepest moment that the care of the insane should be entrusted to persons of judgment and humanity; and that wherever violence and inhumanity are proved they should promptly be checked and punished. But we are now only concerned in directing attention to the different course pursued by the Coroner and the Magistrate as to the examination of a witness declared by law to be "of unsound mind," and to ascertain which of them acted in accordance with the known principles of Medical Jurisprudence.

As we have already suggested, our opinion is, that the Coroner was wrong, and that a person tendered as a witness in a judicial proceeding, is not necessarily incompetent because he has been pronounced insane. To hold otherwise were to confound all distinctions, and contradict the general experience of those who have made insanity their study, and explained the various aberrations of that complex machine—the human mind.

In order fully to sustain our opinion, we will consider this interesting topic, first in its legal and then in its medical bearings.

The competency or incompetency of witnesses was once a much more subtle and difficult inquiry than it has now become under the ameliorating influence of the Legislature. Many legal impediments to a full investigation of facts have been swept away in the progress of time, and what time brings, knowledge. The distinction between the admissibility and the effect of evidence has been more clearly defined, and the prevailing rule is to refuse as seldom as possible the admission of testimony, leaving its force and value to be determined by the wisdom and experience of the tribunal before which it is given.

Some test, however, of competency, that is of admissibility,

must be laid down and abided by. In all civilized and Christian countries, before a witness can give evidence, an oath is administered to him, upon the obligation of which he is to speak the truth. We need not allude to the excepted cases where an affirmation is made instead of an oath taken. The principle is the same, the form different. Such is the law of England. The test then is, does the party tendered as a witness understand the nature and acknowledge the obligation of an oath? If he does he is competent as a witness. An infant of tender years cannot understand the nature of an oath, therefore by our law it is incompetent. An atheist does not recognize the obligation of an oath, therefore, by our law, he is incompetent. But a madman during a lucid interval, may be and has been examined in our courts as a witness, and to apply the test to the instance before us, the witness RICHARD DONELLY, having satisfied the magistrate that he understood the nature of an oath "as well as the Bishop of London or Cardinal Wiseman," he was properly admitted as a witness.

Such we believe to be the law. All our great law writers have recognized two kinds of insanity or mental unsoundness—*dementia naturalis* and *dementia accidentalis*. The one means idiocy, the other madness—the one born with the sufferer, and permanent; the other, permanent, temporary, violent, or partial, and having a different operation and a distinct influence upon every individual whom it seizes. Of the former class, none would be found competent as witnesses; but to establish a universal rule which should exclude the latter would be a manifest solecism in jurisprudence, and tend on occasions to a lamentable failure of justice.

We have hitherto abstained from mentioning the actual delusion under which Richard Donelly, "the funny red-faced little Irishman," was labouring, because it was not important in reference to the legal bearings of this question. It is, however, important, as to the medical bearings, and before entering upon them, which we shall do in a subsequent article, we beg to inform our readers that this poor fellow was labouring under the harmless, and perhaps to him not altogether disagreeable idea, that "sometimes he had one butt of beer and at other times two butts of beer in his inside." We shall have as little difficulty in showing that such a delusion ought not in fact, as we have already shown it does not in law, incapacitate a man from giving his testimony in a Court of Justice.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CXXX.—CASE OF DIFFICULT LABOUR, IN CONSEQUENCE OF TWINS JOINED BY THE BREAST. BY CHARLES STUART, M.D., Chirurgeside, Berwickshire.—The following case is an additional instance of unforeseen difficulty occurring in the course of a labour, in which no certain rules of practice can be laid down, and shows what an amount of obstruction may be overcome, when sufficient time has elapsed for complete dilatation of the maternal passages.

I was called, on the morning of Thursday, the 10th of October last, at seven o'clock, to attend Mrs. E., æt. 22, residing in the village of Chirurgeside, who was in her first labour. On my arrival I found the pains regular, and of good strength. On examination, the os uteri was felt dilated to about the size of a shilling, soft and cushiony, the head presenting in the first cranial position, the vagina well lubricated; and, in short, everything was going on quite favourably. The pains continued steadily to increase, and after a space of four hours the os uteri was well expanded, and the pains began to have a bearing-down character, till about two o'clock P.M., when they recurred only at long intervals. Shortly after three o'clock the pains returned with con-

siderable violence and frequency; but little or no change had taken place in the position of the head, and there seemed to be great difficulty in its passage through the brim into the cavity of the pelvis. I found that by allowing my patient to lie down the strength of the pains was most materially decreased, so I determined to keep her moving about as long as was prudent. I never recollect noticing this to such an extent in any other case, when the pains were so violent. The cranium advanced with extreme slowness, considering the strong nature of the pains, and it was only after the most severe straining that the head began to press on the perineum, and after a very tedious passage was born about seven o'clock p.m. The pains previous to this were of the most frightful description, and they were now, if it was possible, increased. Some apparently insurmountable obstacle seeming at this stage to oppose the further exit of the infant, I tried by every means in my power to discover the cause of delay, but from the extreme tightness of the parts it was impossible to ascertain its nature. I dreaded, from the enormous straining, that the uterus would speedily rupture, unless delivery was immediately effected, so accordingly I applied at first gentle traction; but, when I found that unavailing, I was forced to increase it to what previously I should have considered a most unwarrantable degree, and succeeded in delivering the shoulders, when for the first time I discovered something unusual. I continued, however, my traction as my only hope of getting the woman delivered; and, after using the greatest force, I was in no small degree astonished when another head came down, with the face considerably flattened. This second head lay twisted round upon the back of the first delivered infant. After further perseverance, I succeeded in extracting two males, still-born, and intimately joined from the sternum to the umbilicus, into which an umbilical cord, common to both, was inserted. The placenta speedily followed, and was not larger than is usually seen in cases of twins. The umbilical cord was rather thicker than usual. About an hour elapsed from the time the head was born till the delivery was completed. The pains during that period were of the most agonising and alarming character, and made me regret exceedingly having no chloroform. After a careful examination of the external parts, I was very glad to find no perineal laceration, which I feared very much from the passage of such a mass. The twins were at the full time, and fifteen inches long. The band of connexion extended from the upper part of the sternum to the umbilicus, and was seven inches broad and three long; and the diameter of the twins, when laid together, was six and a-half inches. They were perfectly and fully formed in other respects, but the head that presented first was the larger of the two. I failed in obtaining permission to make any more particular examination.

When we consider the breadth of the connecting band between the two children in the above case, we see more clearly how the head of the second child could assume the position that it did, and to what an extent the connecting band must have been stretched to have allowed of its being placed at the back of the shoulders of the other child when delivered.

My patient is a woman of slender figure, but well formed, and of good constitution. During her pregnancy she enjoyed excellent health, which in some measure strengthened her for the extreme trial she had to undergo, and which she endured with the greatest fortitude.

She has made a most excellent recovery, and is now quite strong.

No doubt the long delay before the head was born, in a great degree saved her from the danger of perineal laceration, as there was ample time for complete dilatation, which was so essential for the safe passage of such a mass as had to follow.—*Monthly Journal of Medical Science*, Jan., 1851.

CXXXI.—DR. D. MACLAGAN ON THE APPLICATION OF CAUSTIC TO THE HÆMORRHAGE FROM LEECH-BITES.—The following is the substance of some remarks made by Dr. D. MacLagan on the arresting of hæmorrhage from leech-bites.

In cauterizing to arrest bleeding from a cavity, as a leech-bite, or the alveolus of the jaw, it is obviously essential that the caustic or cautery penetrate to the very bottom of the wound, which is probably the chief source of the hæmorrhage. In leech-bites in children, Dr. MacLagan has seen a piece of caustic cause much pain, and yet leave the bleeding artery as active as ever, simply because it was too thick to reach the bottom. He has often, therefore, had recourse to a simple and ingenious plan recommended by the late Dr. James Hunter; viz., to powder a piece of nitrate of silver, heat the point of a silver probe in a candle, and dip it into the powder; it thus becomes crusted with the nitrate, and forms a fine button of caustic, which will easily reach the bottom of any such wound. When the bleeding has been stopped, we must be-

ware of injudiciously meddling with the part; the occlusion of the divided vessels is as yet only temporary, and may be easily overcome.—*Edinburgh Monthly Journal of Medical Science*, November, 1850.—*London Journal*, 1851.

CXXXII.—SCROFULOUS DISEASE OF THE JOINTS HAVING ITS ORIGIN IN THE CANCELOUS STRUCTURE OF THE BONES. BY SIR BENJAMIN BRODIE.—As a general rule, children who are thus afflicted will derive much benefit from passing the greater part of each year on the sea-coast. They may bathe in the open sea in the summer, and use the warm sea-bath during the winter. The air of the country is to be preferred to that of a crowded city, and in fine weather they should pass as much of their time as possible out of doors. They should live on a plain nutritious diet, avoiding many of those articles which are given to children, not because they are wholesome, but because they are agreeable to the palate. The bowels should be carefully regulated, without recourse being had to anything like drastic purgatives. Occasionally, a wrong state of the secretions furnished by the organs of digestion may indicate the administration of some alterative doses of mercury, but mercury should never be used on any large scale, so as to place the system under its specific influence.

It is more difficult to determine the real value of remedies in a disease which is so completely chronic, than it is in acute diseases; but, from the long experience which I have now had, I am satisfied that, of what are called tonic medicines, none are so generally useful in these cases as preparations of iron. They must be given, however, not merely for a few weeks every now and then, but, with occasional intermissions, for a very long period of time. To children I generally give some simple preparation, such as the *vinum ferri* of the old pharmacopœia, or the syrup of the citrate, and sometimes of the iodide of iron, for three or four weeks. I then direct it to be omitted for a week or ten days, then to be given again; and so on, for two or three years, or even for a longer period. If the dose given in the first instance should prove to be too stimulating, it may be diminished. For those children with whom iron does not agree, other tonics, one at one period, another at another, may be substituted for it,—quinine, decoction of cinchona, sarsaparilla combined with the *liquor potassæ*, or infusion of gentian. The mineral acids, on the other hand, may be given when the appetite fails, or there is a disposition to night-sweats. I do not venture to say, that the iodide of potassium, or other preparations of iodine, are never useful in these cases; but my own experience has led me to believe, that great as the beneficial influence of these remedies undoubtedly is, in many other diseases, their usefulness in the various forms of scrofulous disease has been very much overrated. But there is another remedy, regarding which, although I have had much less experience of its effects than I have had of iodine, I cannot doubt that it may be often employed in these cases with the greatest benefit; I allude to the cod-liver oil. A child may take a teaspoonful three times daily, and an adult may take a proportionally larger quantity, for three or four months at a time. It is quite compatible with the exhibition of iron, which may be given in the intervals, or simultaneously with it.

When abscess occurs, the common complication of this disease, he suggests the following treatment:—

"An opening having been made with an abscess-lancet, the limb may be wrapped up in a flannel wrung out of hot water, and this may be continued until the first flow of matter has ceased, a poultice, or water dressing, being applied afterwards. In some instances, after a short time, the discharge ceases; the orifice heals, and the puncture may then be repeated some time afterwards. But where the puncture has not become closed, I have never found any ill consequences to arise from its remaining open. On the contrary, I have no doubt that it is desirable that the wound should not be closed until the abscess has contracted, granulated, and healed from the bottom; and this is one reason for making, not a small puncture, but a free opening with an abscess-lancet. Another reason is, that the matter will escape readily without squeezing or pressure. *All rough manipulation is to be carefully avoided.* It produces hæmorrhage into the cavity of the abscess, the ill consequences of which I have already pointed out; and, independently of this, it may excite inflammation of the cyst, attended, where the surface is extensive, with so much constitutional disturbance as to endanger the life of the patient at the time, and materially lessen the chance of his recovery afterwards.

"The treatment of the sinus which is left after the opening of an abscess, may be comprised in a few words. If the orifice be disposed to heal prematurely, this may be prevented by the occasional application of the caustic potash, care being taken that the caustic does not enter the sinus itself; otherwise some simple

ointment or a water dressing is all that is required. The old practice of probing a sinus scarcely ever affords us any useful information; nor does it in ordinary cases answer any other good purpose. On the other hand, by irritating the sinus, or even the joint itself, it is often productive of serious mischief. The same observation is applicable, but with greater force, to the use of stimulating injections. I do not believe that they promote the healing of sinuses under any circumstances; but, with respect to those which are now under our consideration, there is no doubt that their operation is highly injurious. I saw a young man who nearly lost his life in consequence of a surgeon having ventured to inject port wine into a sinus connected with some diseased or dead bone of the pelvis.

"But for the attainment of a cure, in addition to skill and attention on the part of the surgeon, there is required a large stock of patience and self-discipline on that of the patient and his friends. It is no small proportion of those who are born to the enjoyment of ease and affluence who expect such an exemption from the evils of life, as does not belong to human nature. Such persons, in cases of this as well as of most other chronic diseases, are too often not content to await the good which may gradually be obtained from a long perseverance in the use of some simple but efficient remedies. They pass from the hands of one empiric to those of another; listen to, and believe any promises which are made to them; and at last, when it is too late, discover that they have been in error, and that in their anxiety to obtain a speedy cure, they have lost the chance of that ultimate one which they might have obtained otherwise."—*Sir Benj. Brodie on Diseases of the Joints*, pages 130-32, 136-37, 146-47.

CXXXIII.—OBSERVATIONS ON ULCERATION OF THE ARTICULAR CARTILAGES.—"The cases here referred to occur more frequently in private than in hospital practice: and (whether it be accidentally or not I do know) it certainly has happened that I have met with it more frequently in the female than in the male sex. The patient complains of pain, which, however, is referred not so much to the joint itself, as to the arm a little below it, near the insertion of the deltoid muscle. At first the pain is trifling, but it soon becomes severe and constant. The patient describes it as a *wearing* pain, of which she is constantly reminded. It is aggravated by every motion of the limb, and by pressing the articulating surfaces against each other. Not only is there no perceptible enlargement of the shoulder, but after some time, in consequence of the want of use and wasting of the deltoid muscle, it seems to be actually reduced in size. It is not long before the mobility of the joint is impaired, becoming gradually more and more limited. When the patient attempts to raise the elbow from her side, it is observed that the scapula is elevated at the same time with the humerus. She is unable to raise her hand to her face, nor can she rotate the limb so as to place it behind her. When the progress of the disease is stopped at an early period, the mobility of the joint may be restored; but otherwise, although the pain and all other symptoms of the disease have subsided, the joint remains stiff, and to all appearance completely ankylosed. Whatever motion the arm is capable of, under these circumstances, depends not on the humerus, but on the scapula; and it is remarkable to what an extent the scapula, or rather the muscles belonging to it, will accommodate themselves to this new state of things, so as to make up for the deficient motion of the shoulder.

"It certainly is seldom that this disease terminates in abscess of the joint when proper attention has been paid to the treatment of it, nor has this happened in any case in which I have had the opportunity of closely observing its progress. I have, however, seen cases of abscess with ulceration of the cartilages, and complete destruction of the shoulder-joint, in which I conclude that, if I had been consulted at an early period, I should have found the symptoms to correspond with those which I have just described.

"Whether it be from this, or from any other disease, that the joint of the shoulder is brought to such an extreme state of disorganization, one result is, that it is liable to dislocation, or, more properly, to sub-luxation in the direction forwards. In one case, in which I had the opportunity of examining the parts after death, I found the anterior margin of the glenoid cavity of the scapula destroyed by ulceration, the head of the humerus permanently resting on the ulcerated surface. In another case, in the living person, I found the dislocation to be only occasional, the head of the bone slipping forward so as to make a visible projection in certain motions of the arm, and in certain other motions returning to its natural situation.

"I may take this opportunity of noticing another circumstance, which, though not of much interest in pathology, is of some importance in practice. An abscess originating in the shoulder-

joint, sometimes presents a peculiar appearance when it is making its way to the surface. A dissection, which I once had the opportunity of making, will explain at once the nature and the cause of this peculiarity. The abscess, taking the course of the tendon of the long head of the *biceps flexor cubiti* muscle, had suddenly emerged from the joint at the lower end of the bicipital groove of the humerus: then, having taken a direction forward, on the anterior edge of the deltoid muscle, had presented itself under the integuments, having a spherical form, so that it might have been mistaken for an encysted tumour. I met with one case, in which this mistake respecting an abscess of this kind was actually made by a surgeon of considerable experience, who proposed the removal of the tumour by the knife."—*Ibid*, pp. 205-7.

CXXXIV.—THE TREATMENT OF FALSE JOINT AFTER UNUNITED FRACTURE.—When the principle of "subcutaneous incision" came into use, the idea struck me that this important addition to surgery might be made available towards the remedy of ununited fracture; and accordingly I proposed that a strong needle, having been passed obliquely down to the part, should have its edge freely moved about in all directions, so as to cut up the ligamentous bond of union, as well as the dense investment of the ends of the bones; the needle being then carefully withdrawn, and the puncture covered by plaster or collodion. The parts will probably be reduced to a state very similar to what attends on ordinary fracture at the first. A pouch of blood will form; the blood will be absorbed; fibrin will take its place; inflammation being absent, the plasma will become organised, while, at the same time, secretion and organisation may advance from the ends of the bone; and consolidation, as by definitive callus, be completed. . . . My experience, as far as it goes, speaks in favour of the practice. Lately, this method succeeded, quite beyond my expectation, in consolidating an ununited fracture of the humerus, which had sustained compound injury about ten months before. The bones overlapped, and could not be adjusted. Altogether the case was so very unpromising as led me to remark, while performing the subcutaneous puncture, that it was an unfair test of the practice; and that, under such circumstances, a successful issue could scarcely be expected. Yet, on the first undoing of the splints, five weeks after the puncture, the parts were found quite firm.—*Miller's Surgery*.

CXXXV.—TREATMENT OF SPRAINS AND BRUISES.—Nothing is more common than to apply leeches immediately after infliction of the injury, in order that they may suck out the extravasated or "bruised blood," as it is called. But these little animals drink only from the running stream, drawing for themselves from the blood-vessels; and, therefore, they fail to perform what is expected of them by their employers. At the same time, their bites, admitting the external air to the extravasated blood, are likely to induce suppuration in the areolar tissue. They are of use only at a more remote period, to moderate inflammatory action, occurring as a secondary result of the injury. Friction, in like manner, is often employed from the first, and of a stimulating nature. The result is, to induce and aggravate inflammatory action; an event which it ought to be our main endeavour to avoid. Friction is expedient only after the period of excitement has passed; and, even then, it must be at first employed gently and with caution.—*Miller's Surgery*.

CXXXVI.—ON PERICHONDRITIS LARYNGEA AND ITS RELATION TO OTHER MORBID PROCESSES. By Dr. Dittrich, of Prague.—The name of this disease is due to Albers. Before his adoption of the present designation, the affection was known under the terms, *Vomica laryngis* (Sachse), *Necrosis laryngis* (Porter), *Abscessus submucosus laryngis*, *laryngitis submucosa*, *laryngite de la région sous-glottique du larynx* (Cruveilhier). Albers was the first who referred this process to an inflammation of the perichondrium.

Any portion of the larynx, most frequently the region of the circoid cartilage, occasionally the thyroid cartilage, and more rarely the vicinity of the arytenoid cartilages may become the seat of a saccular abscess, varying in size, and usually formed of a thick, whitish gray, or slate-coloured fibrous tissue, which, in part, exhibits a perfect epigenesis (or new formation), and in part appears to be fused into the surrounding muscular and cellular tissues. This capsule contains a thick purulent or ichorous fluid. No trace of the perichondrium can be detected, and the affected cartilage is found to be either entirely, or only partially, imbedded in pus, occasionally floating freely, as it were, in the fluid. The sacular abscess either exists independently, or, having opened into a neighbouring cavity, is found to have discharged a portion of its contents, which are not unfrequently mixed with portions of destroyed cartilage. When the sacular

abscess surrounds the cartilage, it may contract the cavity of the larynx by its further development and by the formation of a tumour, and thus mechanically obstruct the organs of respiration and speech during life. Abscesses round the cricoid cartilage very frequently in no way affect the laryngeal cavity, but extend towards the lower portion of the pharynx, and, in that case, present an obstacle to the act of swallowing. In some cases, this sacular abscess appears under the general investments as a circumscribed, fluctuating tumour. We frequently meet with these abscesses after death, when there is no tumour present in any contiguous cavity, and when no symptom during life had made apparent the existence of any such affection. According to Kunze and Albers the pus is generally discharged into the cavity of the larynx, and more rarely into the pharynx; but it would appear from Dr. Dittrich's observations, that the latter is most frequently the case. When the abscess remains enclosed within its sac, the contents are usually a thick, greenish pus, but when the sac has burst, and has given free admission to the air, a dirty brown-coloured, offensive ichor is commonly mixed with the pus.

The exposed cartilage lies either loose in the abscess, or, what is more frequently observed, is connected in one or more points with the perichondrium, and, by means of the latter, with the surrounding parts. The cartilage either retains its normal tissue (in young persons, and where the disease is of recent date), or it is ossified; the process of ossification having existed previously to the occurrence of the process, or being of subsequent date. That the latter is actually the case, is proved in cases of young, healthy individuals, where all the cartilages of the larynx and the air passages, together with the intercostal cartilages, were in a perfectly normal condition, the portion of the cricoid cartilage that had been denuded of the perichondrium and was enclosed by the sacular abscess, being alone converted into a flabby mass of bone-earth. There are other changes besides that of ossification affecting the denuded cartilage; for, besides the loss of its translucence and its shiny appearance, and its dirty, yellowish discoloration, it becomes changed into a gelatinous mass, while its cartilaginous texture degenerates into a granular consistency. In the less intense degree of the affection, the intercellular substance at a distance from the surrounding pus, changes into a fibrous mass, accompanied with a striking development of fat (atrophy according to Rokitsansky). The cartilaginous and ossified cartilage may become affected with a species of caries from the corrosive action of the surrounding fluid (Hastings, Ryland). There may be atrophy, attenuation, and solution of the cartilage into a cheesy mass (Albers); or a metamorphosis into a soft, butter-like substance (Dectz); or into a mass resembling pumice (Tronseau, Bellocq); or a diminution and attenuation of the ends of the cartilage; or a folding over of the margins (Jansen); a perforation or a separation of the cartilage into several parts, &c., &c. Porter found the cartilaginous substance partially blackened and soft like rotten leather, and partially brown, horny, and shrivelled.

The walls of the abscess vary according to the period of the disease: when the affection is in its incipient stage they still consist of the usual soft parts; are infiltrated with fluid, discoloured, and covered on the inner surface with an exudation, which is partly coagulated like a membrane, and partly purulent. When the disease is further advanced, the inner surface and the exudation seated upon the soft parts undergo a metamorphosis, the walls being hard, solid, and thickened to one or two lines, discoloured by a bluish grey tinge, and changed into a fibrous callus-tissue, while the muscular tissue can no longer be traced. The further spread of the abscess is manifested by a more or less widely extended and intense serous tumour, which becomes in the highest degree dangerous when involving the mucous and the sub-mucous tissue of the larynx and the entrance to it. When the abscess spreads upwards and posteriorly from the region of the cricoid cartilage, the ligaments connecting the cricoid and arytenoid cartilages, as well as those between the latter and the thyroid cartilage, become naturally destroyed. When the abscess opens into the pharynx, as is usually observed in the majority of cases, its posterior wall becomes the seat of a purulent or ichorous disintegration, corresponding in position with the opposite ichorous sac surrounding the cricoid cartilage, but frequently expanding so far, that Dr. Dittrich has found the areolar tissue lying between the pharynx and the vertebral column infiltrated with pus and ichor, and disintegrated to the extent of a hand's breadth.

Doctor Dittrich has in no case been able to corroborate the opinions of Gendrin, White, Tronseau, Bellocq, and others, who maintain that a healing of the process is effected by the formation of a mass of bone-earth, serving in some degree as a compensation for the ejected and disintegrated cartilage.

The affection may be *primary* and *independent*, running its

course free from all other complications, as we see in the cases recorded by Sandifort, Flormann, Percival, Vernois, Albers, Cruveilhier and Hamilton. Dr. Dittrich observed three cases, (that of a woman aged 70, a brewer aged 47, and a groom aged 38 years), in which no complication with any other affection could be discovered.

These affections of the larynx are more frequently found associated and intimately connected with other morbid processes; among which the typhoid process ranks first in point of frequency.

Doctor Dittrich does not see sufficient grounds for concurring in the views prevailing in the present day, that the typhoid process in its genuine form, *i.e.*, with its characteristic deposits in the ileum, attacks the mucous membrane of the larynx, and thus constitutes genuine laryngo-typhus. He frequently observed the various stages of a process of sloughing on the anterior wall of the larynx, and over the *M. transversus*; but it was invariably found to affect a part of the mucous membrane which could not possibly be the seat of typhoid infiltration. He likewise noticed the same process on the lateral margins of the epiglottis, but here the sloughing affected only an unfiltrated mucous surface. The above view is further opposed by the circumstance, that any deposition similar to the one observed in the region of the ileum, does not occur on any other portion of the mucous membrane of the air-passages, since it is not probable that the small spot over the *M. transversus* of the larynx should be the only seat of the genuine typhoid process. Since it is always by means of a process of disintegration of the base of the ulcer that the affection spreads when the ulcer has denuded the cartilage, it is not improbable that the beginning of the process may be owing to a similar morbid condition.

Another ground of dispute, referring to the question first raised by Jansen, is, whether the exposure, necrosis, and exfoliation of the laryngeal cartilage arising from the development of the typhoid ulceration on the mucous membrane of the posterior wall of the larynx, differ, and should be distinguished from true perichondritis laryngea, which arises independently, and in consequence of typhus, either with or without simultaneous typhoid ulceration of the larynx? Jansen strongly advocates the separation of these processes, which he regards as very different in character, considering the inflammation of the perichondrium in the development of the typhoid ulcer, as an incidental secondary condition of very subordinate importance. Dr. Dittrich, on the other hand, while he indeed admits that the two processes differ in their incipient stage, and therefore, ontologically considered, demand a distinct classification, regards their further development to be alike in character, sequelæ, importance, and danger. Nor is the determination of the exact nature of the process present in individual cases so difficult as might be expected, since, according to Dr. Dittrich, secondary perichondritis (or typhoid ulceration), with loss of substance on the margins of the epiglottis, usually exhibits a much greater destruction of the mucous membrane than the independent form, in which the cartilage is denuded to a wider extent, and which presents an irregular sieve-like perforated destruction of the mucous surface when the abscess has opened into the laryngeal cavity. As the independent form generally attacks the cricoid cartilage, little doubt can be entertained of the secondary character of the perichondritis when this cartilage is unaffected, while the arytenoid cartilages are destroyed, and there is a considerable loss of substance on the inner wall in the region of the *M. transversus*. Cases may, however, present themselves in which an accurate definition is impracticable. Secondary perichondritis would, however, appear from Dr. Dittrich's observations to be by far less frequent than the independent form.

In addition to the cases recorded by Cruveilhier, Boulland, Jungnickel, Hastings, Jansen, &c., Dr. Dittrich gives two cases observed by himself, in which, according to his opinion, the primary disease was undoubtedly that of the perichondrium.

The first case was that of a student, aged 24 years. Leotyphus was in the stage of sloughing, no part affected by ulceration being free from slough. Sanguineous stasis in the lower and posterior portion of the lung. The upper part of the posterior wall of the larynx discoloured, dark gray, and green; an opening about the size of a lentil, having irregular and jagged margins, was seen on either side of the posterior portion of the chordæ vocales; these openings being connected with the pharynx by a larger ichorous cavity, surrounding the base of the arytenoid cartilages, which were exposed by the destruction of their connecting ligaments, and saturated with ichor. This cavity was about 7''' long and from 4-5''' broad. The mucous membrane of the pharynx corresponding with this spot was of a black or greenish gray colour over the surface, measuring about half an inch in diameter; the *lig. aryepiglottica* was infiltrated with serum.

The second case was that of a student aged 22 years. The

patient had recovered from an attack of typhus, when on the 24th day of his convalescence, apparently in consequence of cold, he was seized with lancinating pains in the region of the larynx, which was followed by an irritating cough and hoarseness. A condition that continued with various alterations for five weeks. There was complete loss of voice and embarrassed respiration, in consequence of which the patient entered the hospital. The general health was good; there was no pain on pressing the larynx, the patient was able to swallow, the voice was feeble, the respiration laborious, chiefly effected by the muscles of the neck, inspiration accompanied with a hissing sound; frequent expectoration. The patient was constrained to sit up in bed from the dyspnoea induced by the horizontal position; there were occasional attacks of asthma. As all local means proved of no avail, laryngotomy was performed, and death ensued the following day. Typhoid ulcers in the process of cicatrization lined the lower third of the ileum. The corresponding mesenteric glands were of the size of peas, slate-coloured, flabby and tough. The capsule of the spleen was wrinkled, and contained a reddish-brown tolerably solid pulp. Sanguineous stasis of the posterior and lower portion of the lung interspersed with grayish-red, soft, hepatized patches. On the posterior wall of the larynx, immediately below the posterior angle of the right ventricle of Morgagni a livid coloured opening with irregular margin was discovered, which led to an abscess surrounding the base of the cricoid cartilage, and filled with ichor and necrotic ossified fragments of cartilage. The dull, bluish-gray coloured mucous membrane of the larynx appeared to be pressed inwards, by which the laryngeal cavity suffered considerable contraction, which was further increased by the cedematous swelling of the remaining portion of the mucous membrane.

Dr. Dittrich remarks that inflammation of the periosteum may occur after typhus as a primary affection, similarly to perichondritis. Such cases are, however, extremely rare, and we have only one instance recorded as coming under Dr. Dittrich's notice. This was the case of a day-labourer aged 29 years, who was affected, five weeks after an attack of typhus, with periostitis of the fourth and fifth ribs of the left side, accompanied with sacular abscesses in the vicinity of the affected parts. One of these sacs opened into the cavity of the pleura, and gave rise to pleuritis and pericarditis with extensive purulent exudation.

Rokitansky, Albers, Hasse, and Jansen, mention *measles* as constituting a fatal complication; and one case is recorded by Dr. Dittrich in confirmation of this view.

Crucveilhier has met with one case of this laryngeal affection, as the sequelæ of *pneumonia*. A young man, a native of Switzerland, was received in the hospital for a pneumonic affection, from which he no sooner recovered than he began to complain of pain in the larynx, accompanied with oppressed respiration, aphonia, and attacks of suffocation as in croup. He died on the fifteenth day after the appearance of these symptoms. The *post-mortem* examination revealed the existence of an abscess surrounding the cricoid cartilage and tumours in the cavity of the larynx; the cartilage was entirely surrounded by purulent deposits, perforated and reduced at some spots to a thin lamella; the articulation of the arytenoid with the cricoid cartilage was entirely destroyed, and the former could be turned aside in all directions.

Porter has noticed the occurrence of this laryngeal affection, as a sequela of secondary syphilis; and Hasse, Albers and Jansen, have also recorded cases proving this complication. Rokitansky refers to the mercurial disease, as a special complication. The laryngeal affection in these cases, is not, according to Dr. Dittrich, primary perichondritis, but a complication affecting the other soft parts of the larynx, and leading to the true syphilitic laryngeostenosis. The whole or the greater portion of the exudation becomes converted into a fibroid, cicatrix-like tissue, contracting the laryngeal cavity; a portion of the exudation is frequently decomposed into pus, causing ulcers of various extent and depth, to form on its inner surface, in the vicinity of the mucous membrane of the larynx. Where the deeply seated exudation, surrounding the perichondrium, becomes purulent, the perichondrium will be destroyed, accompanied with necrosis of the cartilage, by which means the abscesses formed around the laryngeal cartilages are made apparent. The perichondritis laryngea, accompanying syphilis, is not therefore an inflammation limited to the perichondrium, but differs from the other forms by the simultaneous implication of the other laryngeal tissues.

Tuberculosis, especially when of the lungs, has been less frequently observed to constitute a combination with these affections of the larynx. Dr. Dittrich records the observations he made, in reference to two cases of this nature. The first case was that of an office clerk, aged thirty-nine years. The body was emaciated, the general integuments dry and scaly. The trochanters and the

sacrum exhibited deeply-seated bed-sores, on their posterior surfaces. The lungs were interspersed in all parts with isolated, or more largely grouped, old and recent gray tubercular and gelatinous infiltrations on the upper lobe. Tubercular nodes were profusely scattered through the enlarged spleen, in the kidneys, and in the somewhat fatty liver, and less numerous in the mucous membrane of the lower ileum. The glands surrounding the bronchi, those on the anterior and posterior mediastinum, and those round the pancreas, were converted into tubercular tumours of the size of walnuts. The mucous membrane of the larynx was the seat of a tuberculous deposit. The cavity was slightly contracted by the prominence of the posterior wall. The base of the cricoid cartilage was the seat of an ichorous abscess; the cartilage was rough, brownish, discoloured, and completely ossified; and exposed towards the lower portion of the pharynx by means of a cruciform opening surrounded by margins saturated with ichor. The corresponding portion of the posterior wall of the pharynx was converted into a smaller ichorous ulcer, only about a quarter of an inch in diameter, but extending as far as the bodies of the vertebrae.

The second case was that of an office-clerk, aged thirty-one years. The body was much emaciated, pallid, the muscles thin and flaccid. Bed-sores on the sacrum, the trochanters, the margin of the shoulder-blades, and over the spinal processes of the vertebral column. There was a highly-developed tuberculosis of the lungs, together with old cavities in the upper lobes, with recent deposits of yellow infiltrated tuberculous matter, which latter was also observed in the lower lobes. Acute tuberculous ulceration of the intestines. Atrophy of the heart. Small, shallow ulcers of the size of peas, and having jagged margins, were seated on the posterior margins of the chordæ vocales, and in the cavity of the larynx, and occasionally filled with small yellow granules. Similar round shallow ulcers (aphthæ) in the appendicular portion of the trachea. A sacular abscess about the size of a hazel-nut, opening into the pharynx, surrounded the upper portion of the cricoid cartilage; the opening was $4''$ long and $6''$ broad. The cricoid cartilage was ossified, its upper margin being still entire, smooth, and uncorroded, and as the perichondrium was destroyed, it looked freely from the cavity of the abscess into the lower part of the pharynx. The diameter of the opening was $1\frac{1}{4}''$; it was round, and had sharp, smooth, unbroken margins. Below the destroyed mucous membrane, a second thickened part was observed, which corresponded with the muscles of the posterior wall of the cricoid cartilage, which were, however, no longer recognisable as muscles, but had been converted into a gray fibrous tissue. The posterior wall of the pharynx, at the part corresponding with the cricoid cartilage, was discoloured green and grayish-blue, and changed to a soft, villous, ichorous substance, without any loss of substance. The subjacent muscular coat was thickened, of a dirty gray colour, and could be readily torn. The ligaments at the base of the arytenoid cartilage destroyed. There was extensive cedema of the mucous membrane surrounding the arytenoid cartilage and of the *lig. aryepiglottica*.

Dr. Dittrich supposes the connexion between the affection of the laryngeal cartilages and tuberculosis to be dependent on a *decubitus*, since the perichondritis observed in the two cases recorded, did not arise from tuberculous ulceration of the larynx. This *decubitus*, similar to those found in Case 2, on the skin of the sacrum, the trochanters and scapulae, is the result of the pressure of the ossified cricoid cartilage on the soft parts covering the anterior surface of the vertebral column; and is only to be distinguished from the other sores resulting from *decubitus* simultaneously present in the general investments, by the circumstance, that here there is a mucous canal running between the vertebrae and the cricoid cartilage, and whose opposite walls are in constant contact with each other.

Dr. Dittrich regards among the circumstances favouring the origin of these affections on the posterior wall of the larynx, a more or less considerable dryness of the mucous membrane, long continued rest, and less frequent movement of the larynx downwards and upwards, together with less frequent swallowing in the later stages of the disease, in consequence of the want of appetite, unconsciousness and apathy, characteristic of the affection. Ossification of the cricoid cartilage seems to be essentially a necessary character of the disease.

Dr. Dittrich, in advocating this view of the origin of *perichondritis laryngea* combined with tuberculosis, in no way wishes to exclude the possibility of other predisposing causes. He is, however, of opinion, that his views derive considerable support from the observations he has made on aged persons who have died in a state of marasmus, after prolonged confinement to their beds, and in whom he has frequently found extensively diffused bed-sores on the trochanters, together with incipient symptoms of an

analogous affection between the cricoid cartilage and the anterior surface of the vertebral column. We give the two following cases in illustration of these observations.

Case 1.—The *post mortem* examination of a soldier, aged eighty years, showed excessive emaciation; slight oedema of the feet; bed-sores on the sacrum and the right trochanter. Pleuritic exudation on the left side, partly in the form of fibroid organized matter, and partly in a saccular abscess. Tuberculosis of both lungs. Chronic and acute tubercular ulceration of the intestines. Enlarged and fatty liver. Senile atrophy of the brain with chronic dilatation of cerebral cavities. Marasmus of the spleen, kidneys, heart, and other organs. A discoloured, pale, roundish ulcer, measuring about three-fourths of an inch in diameter, surrounded by fatty ichorous margins, and with a thoroughly disintegrated centre, was found on that portion of the anterior wall of the pharynx, which corresponds with the posterior wall of the cricoid cartilage. A similarly shaped sphacelated spot, which, like the former, penetrated far into the softened muscular substance, and which was more than an inch in diameter, was situated on the corresponding posterior wall of the pharynx. The cricoid cartilage was ossified.

In the 2nd Case, which was that of a carpenter, aged thirty-six, years, the body was exceedingly emaciated. There were bed-sores on the skin in many portions of the posterior surface of the body. Marasmus of the bones, muscles, and cellular tissue. Chronic hydrocephalus with cerebral atrophy. Senile emphysema of the lungs with lobular hepatisation of the lower lobe of the left lung. General anæmia. Chronic dysenteric process throughout the large intestine. There were round ulcerated spots on the anterior and posterior walls of the pharynx, corresponding in position with the ossified cricoid cartilage, which were saturated with ichorous exudation, and penetrated far into the muscular tissue.

If Dr. Dittrich's views should be confirmed by further observations, we shall have obtained one ground of explanation for many of those cases in which abscesses are found deposited around the cricoid cartilage, with perforation of the pharynx, in typhus and other diseases that begin with extensive bed-sores.

Doctor Dittrich remarks in conclusion, that in consequence of the mode of origin of secondary perichondritis, few symptoms can be manifested during life with the exception of a difficulty in swallowing. The cavity of the larynx is more rarely the seat of a tumour, in consequence of an outlet being furnished for the discharge of the pus or ichor through the opening of the pharynx, and hence there may be no symptom of contraction of the larynx. The apathy induced by the fundamental disease also affords further explanation of the frequent cases in which these threatening local affections of the larynx remain undiscovered till after death.—*Prag. Vierteljahrsschrift*, 1850.

CCXXXVII.—ENCYSTED TUMOURS TREATED BY REPEATED INJECTIONS OF IODINE.—M. Borelli employs with success repeated injections of iodine, in a manner peculiar to himself.

At any point of the tumour, an ordinary lancet is forced in, a little obliquely and flatly, which, penetrating into the cyst, leaves an opening of about a "demi-centimètre" (2 lines), from which the matter contained in the cyst is pressed out, then the pure alcoholic tincture of iodine is injected, which has been previously prepared in a syringe, and care should be taken not to suffer it to escape. The opening is closed with a piece of diachylon, or simply with a little lint spread with cerate, and this is secured by means of an appropriate bandage. The pain following the injection is very acute for a minute or two, and within twenty-four hours inflammation in the tumour ordinarily comes on, which, if very severe, is immediately subdued with an emollient cataplasm. The tumour, which was painful and hard, grows soft, collapses, and begins to pour out a coloured liquid. If cataplasms are not applied, the inflammation takes its course, ordinarily lasting three days, and then subsides entirely; the tumour softens and allows the injected tincture mixed with liquid pus to flow from the opening.

Sometimes after the first injection, and at the end of the local reaction, the cyst may be already felt detaching itself in the tumour, and may even be drawn out with pincers; but ordinarily the injection must be repeated once, twice, and even three times before obtaining a complete separation. When the extraction of the cyst is complete, it is certain that the cure will be a radical one, and it only remains to make the surrounding tissues adhere, which generally takes place rapidly.—*Journal de Médecine de Bruxelles*, January, 1851.

CCXXXVIII.—ON THE EXTERNAL EMPLOYMENT OF ICE IN TYPHUS FEVER.—We read in the *Bulletin de Thérapeutique*, that the use of ice cataplasms applied to the abdomen in typhus fever, suc-

ceeds very well according to M. Sandras, and that this application, which ordinarily causes tenderness and flatulency of the stomach rapidly to disappear, also renders less frequent two formidable accidents of this disease, viz., perforation and intestinal hæmorrhage. It appears that M. Sandras has not for many years seen one single example of these perforations; and as to hæmorrhage, it is only lately that he has had an opportunity of observing one which, by its critical character, constitutes a curious and instructive fact.

A young girl, aged 22, affected with typhus fever, was treated at Beaujon by the method which this doctor usually employed in these cases; that is to say, purgatives, and ice applied to the head and to the abdomen. The disease followed a regular course, when, on the 9th July, the young woman experienced a sudden desire to go to stool, and discharged some black blood, partly liquid and partly coagulated, which half filled the night-stool. She lost as much twice in the same day, which produced great weakness; but, the next day, contrary to what one might have expected, her countenance was more natural, the eye more lively, the intellect clearer, fever less violent, and she expressed a desire for food. The applications of ice were persisted in, and it was also given internally. The 10th July there were two more bloody evacuations, but much less abundant than those of the day before; and, on the 11th, she had but one. From this time the state of the patient, which might, under other circumstances, have been exceedingly dangerous, rapidly improved.

Intestinal hæmorrhage, coming on suddenly in the course of typhus fever, is indeed one of the most alarming symptoms. It shows itself at the end of the second period, and ice is the most efficacious remedy with which to combat it. We have also seen M. Chomel use in a similar manner to M. Sandras, frozen cataplasms of gum water, with the addition of 15 or 20 drops of sulphuric acid to the pint, as well as ice lavements. These lavements, however, are but useful auxiliaries, as they only act at a distance, and do not reach in any case the very seat of the hæmorrhage.—*Journal de Médecine et de Chirurg. Pratique*.

CCXXXIX.—THE CÆSARIAN SECTION SUCCESSFULLY PERFORMED BY M. CUSTODI.—A woman, 33 years of age, ten months married, good-looking, but rickety, having gone her full time and feeling the first pains of labour, called in a midwife, November 22, 1849. The latter in concert with M. Bianchi, discovered an unusual narrowness of the inferior outlet. M. Bianchi called in consultation M.M. Ferrari, Custodi, and Lualdi. They found that the chief obstacle proceeded from the inferior outlet, the transverse diameter of which was only two inches. The membranes were ruptured, the pains continued strong but produced no effect; the child being still alive, they decided on performing the Cæsarion section. This was immediately done by M. Custodi, who made a longitudinal incision in the abdominal parieties along the median line. He removed a fine lively female child, who saluted the day with her cries. After the extraction of the placenta, they closed the wound by sutures. M. Custodi had, during the operation, with the utmost care, held the walls of the abdomen as near as possible to the uterus, in order to avoid the slightest entrance of the air or blood into the peritonæum. Although from the second day, peritoneal inflammation set in with fever and tympanitis, the lochia continued to flow, and the wound cicatrised in spite of the constant movement caused by a cough consequent on the severity of the season. In about fifty days the cure was complete. The treatment consisted only of continued applications of ice, ice internally, together with lavements and purgatives.—*Gazetta Medica Lombarda—Nouvelle Encyclographie des Sciences Médicales*, November, 1850.

MEDICAL NEWS.

THE PUBLIC HEALTH.

(From the Weekly Return of the Registrar-General.)

The number of deaths registered last week in London amounts to 1,037; while in the ten corresponding weeks of the years 1841–50 it varied from 960 in 1843, to 1,401 in 1848, and the average was 1,149. This average, if it be augmented in the ratio of previous increase of population (1.55 per cent. per annum) up to the present time, becomes 1,253, compared with which the present return exhibits a great decrease; but it will be borne in mind that violent epidemics, which multiplied the deaths of the period from which the average is drawn, have also left a less population to yield a smaller contribution of mortality. If the two returns of the last fortnight be compared, it appears that whilst they almost coincide as regards the total number of deaths, they differ in the proportions in which prevailing diseases have proved

fatal. The zymotic class of diseases numbered 173 deaths in the preceding week (ending January 11th), but in the last week they rose to 196; whereas "diseases of the respiratory organs," under which were previously enumerated 275, have now declined to 202, though it will be seen that the numbers from phthisis (which is not included in the latter class) have remained almost precisely the same, or about 120. In the previous week, 47 children died from "convulsions;" last week the number rose to 60, more than half of these being infants less than three months old. Small pox was fatal last week to 21 persons, of whom five were adults. With regard to three of the children who died, and two men, aged respectively 19 and 39 years, it is mentioned that they had been previously vaccinated. The Registrar of Mile-end Old-town lower, was informed by the father of a family that two of his children had been suffering from small-pox; that one, aged three years, who had been vaccinated at the age of three months, apparently with effect, died, and another, who had not been vaccinated, was in the way of recovery. A house in Whitechapel is also mentioned where three children were suffering from the disease, who had all been vaccinated. The disorder seems to be rife in this neighbourhood, and one of the medical men states, that he has now 29 cases under his care. The Registrar of Christchurch, Marylebone, reports that "between the beginning of November, when small-pox suddenly became prevalent in his district, and the end of the year, 27 persons died of the disease, and in only two of these cases had vaccination been performed." But in order to settle the respective rates of mortality among the protected and the unprotected, it is obviously necessary to ascertain the number in each class living in any district.

In the returns of last week seven localities are complained of as damp from want of drainage, or lowness of situation, or otherwise unwholesome; in two of these scarlatina had been fatal to the children who dwelt in them; in three others pneumonia had been the cause of death; in one a child died from "cholera infantum." A case of chorea, in a girl of 14, who had been ill two years, terminated fatally on the 9th. A man and two women died from intemperance.

The births of 815 boys and 784 girls, in all 1,599 children, were registered in the week. The average of six corresponding weeks in 1845-50 was 1,395.

At the Royal Observatory, Greenwich, the mean reading of the barometer was 29.550. The mean reading of the thermometer was 45°, which is 8° above the average of the same week in 10 years. The excess of the daily mean temperature above the average was on Sunday 11°·5, on Monday 9°·9, on Tuesday 7°, on Wednesday 8°·5, on Thursday 6°·9, on Friday 8°·8, and on Saturday 4°·1. The wind was in the south and south-west.

THE CHOLERA IN JAMAICA.

The *Kingston Jamaica Journal* of December the 31st, has the following gratifying intelligence:—"We are happy to announce that the cholera has now almost entirely disappeared in the district of Laguanea. The hospital at Halfway Tree has been closed, and notice was given in the parish church, that to-morrow (New Year's-day) will be observed, in connexion with the proper services of the day, as an occasion of thanksgiving by the congregation for the mitigation of the disease." A correspondent of the *Kingston Advertiser*, writing from Port Antonio, under date of December 27, says the cholera was abating slowly. The *Kingston Journal*, December 30, says:—"We are glad to state that the cholera is on the decrease in the town of Montego Bay. Most of the cases yield to medical treatment. The epidemic is gradually leaving the parish of Vere, in some districts only one death occurring daily, although diarrhoea is very prevalent. At Trelawny the disease has assumed a mild type since Christmas-day—a period of exactly six weeks since it first made its appearance in Falmouth. Another account says, 'It continues its ravages in the parish. It has made its appearance in several places where it had not previously commenced its work of devastation. At Braco estate, three miles from Rio Bueno, the disease broke out on Monday morning, and by that night there were eleven deaths, and fifteen under treatment, all of which, it is feared, would terminate fatally. In Duncans' and that vicinity there had been several deaths to the 23rd instant.' A correspondent, writing from Lucea under date of the 26th, says things have begun to wear a most awful appearance. There have been seven fatal cases from the commencement of the disease to this day, and four under treatment. God only knows how many will live to behold the dawn of another day. The curtain of darkness is about being drawn around us, and we await its withdrawal in fearful anxiety. The conduct of the young gentlemen of this town since the appearance of the disease has been truly praiseworthy; at all hours they are to be seen administering to the wants of the sick, and assisting in the burial of the dead."

HOMŒOPATHIC FILTHINESS.

Jahr's *Nouvelle Pharmacopée Homœopathique*, published at Paris in 1841, contains, in the list of *Materia Medica*, various disgusting absurdities, among which are *Iachesis*, the poison of the rattlesnake; *formica rufa*, the red ant; *aradea diadema*, a species of spider; *rana bufo*, the toad; *lacerta agilis*, the lizard; *scarabæus melolontha*, the cockchafer; *vierra putorius*, stinking polecat, of which the official part is the fetid secretion from the glands near the anus. The *crivisses*, or fresh-

water crabs, are directed to be pounded ALIVE in a mortar until reduced to a fine paste. This is diluted with about twice its volume of alcohol, then strained, and the liquor preserved for dilution in the usual way. Toads, lizards, cockchafers, and other reptiles and insects are brayed (alive) in the same manner!

We also learn from a contemporary, that to such an extent is the doctrine *similia similibus curantur* carried, that "syphiline" is administered to patients suffering under secondary syphilis, and "blennorrhine," which is gonorrhoeal matter manipulated according to the rules of homœopathic confectionary, is mentioned in the *Homœopathic Archives** as a remedy for gonorrhoea and gleet!!!

We think if the Lords and Ladies who have lately become the victims of this delusion, were to receive a gentle hint of what they were really made to swallow, this filthy imposture would soon cease to be heard of.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on the 17th instant:—Messrs. Harry Octavius Thorold, Bombay; John George Porter, Peterborough, Northamptonshire; Henry Strangeways Hounsell, Bridport; Arthur Bell, Banagher, King's County; Robert Coane Roberts Jordan, Teignmouth, Devon; Thomas Husband, Madras; John Lacey, Woolwich; Henry Noble Watson, Clitheroe, Lancashire; and Thomas Morley Rooke, London. At the same meeting of the Court, Messrs. Henry Meredith Speer, Thomas Beswick Purchas, and George Henry Edwards, passed their examinations for naval surgeons; these gentlemen had previously been admitted Members of the College, their diplomas bearing date, respectively, July 20, 1842; June 26, 1846; and December 11, 1846.

Dr. Henry J. Hayles Bond, Deputy Regius Professor of Medicine in the University of Cambridge, has been appointed Regius Professor of Physic in that University, rendered vacant by the death of Dr. Haviland.

APOTHECARIES' HALL.

The following are the names of gentlemen who passed their examinations in the science and practice of medicine, and received certificates to practise, on Thursday, the 16th of January:—George Bacon Sweeting, Dorset; John Cromwell Blackford, Bromsgrove; Alfred Kitching, Hull; and Edward George Wake, Hull.

KING'S COLLEGE HOSPITAL.

The Corporation of King's College Hospital propose to introduce a measure in the ensuing session, enabling them to hold lands for the purposes of the College, for providing sites for the Hospital, for approaches thereto, and for pulling down the present buildings.

The Queen has conferred a pension of 100*l.* a year on the Civil List upon Mrs. Liston, widow of the eminent surgeon, whose affairs at his decease were not found in the prosperous condition that might have been expected from his extensive practice and professional reputation.

NAVAL APPOINTMENTS.

Assistant Surgeons.—J. W. Bradshaw, from the Amazon to the Royalist; W. Telfer, from the Hastings to the Amazon.

Assistant-Surgeon Frederick F. Morgan (1845), to the Bloodhound steam-vessel, tender to the Sampson steam-frigate at Devonport, for service on the coast of Africa.

Surgeon.—William Loney, M.D. (1845), to the Apollo, 8, troop ship, at Sheerness, *vice* Robertson.

OBITUARY.

Lately, at Boston, John Brown, Esq., M.D., aged 51. The deceased terminated his existence by taking prussic acid. The body was found in the hot-house, and was in a sitting posture, with one arm resting upon a flower-pot. A short time ago the deceased held the office of Mayor, and was a magistrate for the borough. An inquest was held on the body, and the Jury returned a verdict of "Temporary insanity." About fifteen years ago, an eminent surgeon, who had filled the office of Mayor, took prussic acid, and died in the same way.

On the 8th inst., at Chertsey, James Robert Cole, Esq., surgeon, aged 39.

BOOKS AND JOURNALS RECEIVED.

The London and Provincial Medical Directory.

Gazette Médicale de Montpellier.

Journal de Médecine de Bruxelles.

The Bombay Times.

Manchester Guardian.

Gazette Médicale de Strasbourg.

Dublin Quarterly for May, August and November.

METEOROLOGICAL TABLE FOR THE WEEK ENDING JANUARY 18, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Clearest of the Barometer above the Level of the Sea.	Mean reading of the Barometer, reduced to 32° Fahrenheit.	Mean elastic force of Vapour.	TEMPERATURE OF AIR.					MEAN TEMPERATURE OF AIR.		WIND.	RAIN.		Mean amount of Cloud.	AUTHORITIES AND NAMES OF OBSERVERS.						
						Highest.	Lowest.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean.	Evaporation.		Dew Point.	Direction.			Strength.	Number of days it fell.	Amount fallen.			
Jersey.....	49° 11'	2° 6' W.	Feet. 75	29.739	0.292 54.	38.	50.9	41.9	9.0	47.7	45.5	42.9	3.37	0.61	0.850 588.7	0	2.1	4	0.66	5.9	Rev. S. King, F.R.A.S., M.B.M.S.		
Guernsey	49° 33'	2° 40' W.	123	29.623	0.316 51.	42.	49.9	45.3	4.6	47.6	46.5	45.2	3.68	0.31	0.924 536.4	0	2.3	4	0.86	5.5	Dr. Hoskins, F.R.S., M.B.M.S.		
Truro	50° 17'	5° 4' W.	55	29.602	0.309 53.	37.	51.5	44.8	6.7	48.7	46.8	44.5	3.58	0.53	0.874 534.8	0	1.9	7	2.38	7.2	Dr. Batham.		
Exeter	50° 45'	3° 41' W.	140	29.478	0.294 54.	34.	50.9	41.0	9.9	46.6	45.0	44.4	3.39	0.44	0.885 534.9	0	0.3	5	1.73	5.0	Dr. Shapter, M.B.M.S.		
Uckfield.....	50° 59'	0° 5' E.	180	29.725	0.254 49.0	30.0	47.7	39.1	8.6	43.6	41.6	38.9	2.96	0.52	0.851 543.0	0	0.2	4	0.46	7.8	C. L. Prince, Esq., M.B.M.S.		
Greenwich.....	51° 29'	0° 0'	160	29.550	0.260 51.5	34.7	43.5	40.9	7.6	45.0	42.4	39.4	2.96	0.68	0.813 538.3	0	S.W.	—	3	0.55	—	From Reg-Gen. Report.	
Lewisham.....	51° 28'	0° 1' W.	78	29.639	0.272 52.0	34.5	49.6	41.8	7.8	45.4	43.4	40.8	3.15	0.54	0.856 539.4	0	SS.W.S.W.	1.0	2	0.76	6.7	H. Gordon, Esq.	
St. John's Wood	51° 32'	0° 1' W.	150	29.591	0.303 51.0	38.0	49.4	43.3	6.1	46.6	45.4	43.9	3.51	0.32	0.917 536.9	0	SS.W.	2.3	2	0.22	10	G. Leach, Esq., F.Z.S., M.B.M.S.	
Hartwell	51° 49'	0° 51' W.	250	29.440	0.274 51.0	33.1	49.4	41.6	7.8	45.0	43.3	41.1	3.18	0.46	0.931 536.1	0	SS.W.	0.4	3	0.80	7.	Dr. Lee, F.R.S., Treas. M.B.M.S.	
Cardington	52° 7'	0° 25' W.	100	29.605	0.271 51.0	34.0	49.5	40.3	9.2	44.6	42.9	40.7	3.14	0.45	0.875 539.8	0	SS.W.	1.4	2	0.61	7.2	S.C. Whitbread, Esq., F.R.A.S., Pres. M.B.M.S.	
Norwich	52° 37'	1° 16' E.	39	29.649	0.246 49.0	34.0	46.8	38.8	8.0	42.8	40.8	38.1	2.87	0.59	0.848 542.7	0	SS.W.	6.5	2	0.43	6.5	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.	
Nottingham	53° 08'	1° 10' W.	103	29.401	0.251 50.6	29.5	49.3	36.0	13.3	43.4	41.3	38.5	2.91	0.54	0.843 539.1	0	SS.W.	1.0	3	0.14	7.8	W. Brooke, Esq., F.R.A.S., M.B.M.S.	
Hawarden	53°	3° 0' E.	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Dr. Moffatt, F.R.A.S., M.B.M.S.
Stonyhurst	53° 31'	2° 28' W.	381	29.105	0.250 50.5	31.5	48.1	35.6	12.5	42.9	41.0	38.1	2.90	0.51	0.855 532.3	0	SS.W.	2.4	7	0.81	8.8	W. R. Milner, Esq., M.B.M.S.	
Wakefield	53° 41'	1° 30' W.	115	29.457	0.251 53.5	31.0	49.6	37.6	12.0	43.9	41.6	39.6	2.92	0.59	0.864 537.8	0	S.W.	2.4	3	0.17	7.0	Rev. A. Weld, F.R.A.S., M.B.M.S.	
Whitehaven	54° 38'	3° 25' W.	90	29.289	0.263 50.0	39.0	47.8	42.1	5.7	44.6	42.8	40.5	3.12	0.47	0.872 533.9	0	S.W.	3.8	6	2.22	—	J. F. Miller, Esq., F.R.S., M.B.M.S.	
Glasgow	55° 51'	4° 18' W.	121	29.243	0.259 52.8	36.5	49.3	40.0	9.3	44.7	42.4	39.5	3.10	0.60	0.897 532.9	0	W.S.W.	—	7	1.98	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.	
Dunino	56° 16'	2° 49' W.	250	29.056	0.236 48.0	34.0	43.1	36.9	6.2	40.2	38.8	36.7	2.73	0.37	0.882 534.6	0	S.W.	3.6	4	0.42	5.3	David Tennant, Esq., M.B.M.S.	

The highest readings of the thermometer in air were 54° at Jersey and Exeter, and 53° 5' at Wakefield.

The lowest readings were 29° 5' at Nottingham; 30° at Uckfield; and 31° at Wakefield. The least daily ranges of temperature took place at Guernsey, 4° 6'; at Whitehaven, 5° 7'; and at St. John's-wood, 6° 1'; their mean value, 5° 5'; and the greatest occurred at Nottingham, 13° 8'; at Stonyhurst, 12° 5'; and at Wakefield, 12°; and their mean value was 12° 6'. Rain fell on every day at Truro and Glasgow. The largest falls were 2.38 in., at Truro, and 2.22 in., at Whitehaven. The least falls took place at Nottingham, 0.14 in., and 0.17 in., at Wakefield.

The next Table shows the average results for different parallels of latitude.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Temperature of Mean Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity.	Mean weight of a cubic foot of Air.	WIND. General Direction.	WIND. Average Strength.	RAIN. Average number of days it fell.	RAIN. Average fall.	Mean amount of Cloud.
Jersey and Guernsey	Feet. 99	49° 22'	29.681	in. 0.304	52.5	50.4	43.6	43.6	6.8	47.7	46.0	° 44.1	gts. 5.8	0.5	0.857	gts. 588	S.W.	2.0	4	0.76	5.7
Truro and Exeter	98	50° 21'	29.540	0.302	53.5	51.2	42.9	42.9	8.3	47.7	45.9	° 44.5	5.5	0.5	0.850	535	S.S.W.	1.1	3	2.08	6.1
Uckfield to Hartwell	164	51° 19'	29.589	0.273	50.9	48.9	41.3	41.3	7.6	45.1	43.2	° 40.8	3.2	0.5	0.856	539	S.S.W.	0.8	6	0.58	6.3
Cardington to Nottingham	184	52° 54'	29.582	0.256	50.3	48.5	38.4	38.4	10.2	43.6	41.7	° 39.1	3.0	0.5	0.855	541	S.S.W.	3.0	2	0.39	7.2
Stonyhurst to Whitehaven	195	53° 55'	29.384	0.255	51.3	33.8	38.5	38.5	10.1	43.8	41.8	° 39.5	3.0	0.5	0.864	535	S.W.	2.9	5	1.10	7.9
Glasgow and Dunino	186	56° 4'	29.150	0.248	49.4	46.2	38.5	38.5	7.8	42.5	40.6	° 38.1	2.9	0.5	0.860	534	W.S.W.	3.6	6	1.20	5.3

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At JERSEY, heavy gales from the S. and S.E., and squally weather have been general throughout the week. At the instant of the eclipse of the moon on the 17th, she was obscured by clouds.

At GUERNSEY, the 12th, 13th, 17th, and 18th days were generally fine; on the 14th, there was a gale of wind blowing from the E.S.E., which moderated on the 15th, being then accompanied by squalls of rain; during the evening of the 15th, the wind was boisterous from the S.W., and the wind blew strongly on the 16th.

Primroses, daisies, lesser celandine, white and red camelia japonica, pyrus japonica, snowdrops, daphne, laurestinus, and other plants, indigenous and exotic, in flower as usual.

At TRURO, the 12th and 13th days were damp with drizzling rain; the 14th was stormy, and some lightning was seen at night: the 15th was stormy at 9 A.M. in the day; the reading of the barometer was 28.80, it then turned to rise, and increased to 29.63 by 9 A.M. on the 16th. The 16th and 17th were squally; the eclipse of the moon was invisible. The 18th was a fine day and spring-like in its character.

At EXETER, on the 15th, there was a storm of wind, and on the 17th, accompanied by rain; the night following was quiet and bright.

At UCKFIELD, on the 12th and 13th, the sky was overcast and the air was damp; the 14th and 15th were stormy. There was a strong gale during the evening of the 17th, accompanied with showers of rain. The 18th was a fine day. A lunar halo was visible at 10 P.M.

At ST. JOHN'S WOOD, the weather was dull throughout the week; the wind was in strong gusts on the 15th and 16th; at 10 P.M., there was a very heavy shower of rain.

At HARTWELL, till the 15th, the sky was mostly overcast, with occasional rain; there was a white frost on the morning of the 16th; on the 17th there was a thunder storm at $\frac{1}{2}$ past 2 P.M., which continued for half an hour, it passed towards the N.W. Rain and hail fell. Another storm occurred at 4 P.M., and rain continued to fall heavily throughout the night, which caused great floods; the road in some places between Hartwell and Aylesbury being covered by water.

At CARDINGTON, on the 12th, the common bat was observed flying about, partridges generally paired unusually early. The weather during the week has been for the most part cloudy, with sudden gales of wind. On the 17th, heavy rain fell during the night, and the sky on the 18th was free from cloud. The mean temperature of the air this day was fully 10 degrees above its average value.

At HIGHFIELD HOUSE, near NOTTINGHAM, the 12th was overcast, the 13th was fine; on the 15th there was a heavy gale from the S., the reading of the barometer was constantly oscillating to the extent of 0.005 in.; a flash of lightning was seen and the gale ceased. A fine parhelion was seen on the 17th; there was a white frost on the 18th, and a lunar halo and corona were seen at night. The warm weather has invited the bat (*Vespertilio murinus*) to come out each evening. The woodbine is in leaf, daisies, pansies, &c. are in flower, and the Thrush and Missel Thrush are singing.

At NORWICH, the 13th was overcast. The mornings of the 14th, 15th, and 16th were fine; the sky during the latter part of the day was overcast.

At WAKEFIELD, there was rather a heavy dew on the morning of the 18th.

At STONYHURST, the morning of the 12th was rough; the afternoon was fine. On the 13th, there was a strong wind, and rain fell in the evening. On the 14th, the sky was overcast; a cold wind was blowing. On the 15th, the wind in the evening was high; as it was on the 16th. Heavy showers of rain fell on the 16th and 17th. On the 18th, a lunar halo was visible between the hours of 9 and 10 P.M.

At WHITEHAVEN, strong winds have been prevalent throughout the week. On the 16th, there was a heavy gale. On the 18th, a fine solar halo, exhibiting the prismatic colours, was visible between 1 h. P.M., and 2 h. 30 m. P.M.

At DUNINO, the weather during the first three days was very mild, and the air was moist. Fog was prevalent on the 13th. There was a strong S.E. wind on the 15th; a strong gale from the S. on the 16th. The eclipse of the moon on the 17th was invisible.

At JERSEY, rain fell on the 12th, 15th, 17th, and 18th days, the largest fall was 0.35 in. on the 17th.

At GUERNSEY, rain fell on the 12th, 16th, 17th, and 18th, the largest fall 0.473 in. took place on the 18th day.

At TRURO, rain fell on every day, that on the 17th amounted to 1.15 in.; and that on the 14th was 0.53 in.

At EXETER, rain fell on every day excepting the 12th; the fall on the 16th was 0.70 in., and that on the 17th was 0.90 in.

At UCKFIELD, rain fell on the 13th, 16th, 17th, and 18th, that on the 17th was 0.34 in.

At GREENWICH, rain fell on the 16th, 17th, and 18th, that on the 18th amounted to 0.32 in.

At LEWISHAM, rain fell on the 17th and 18th, that on the 18th was 0.42 in.

At ST. JOHN'S WOOD, rain fell on the 11th and 18th, the largest amount was 0.2 in. on the latter day.

At HARTWELL, rain fell on the 17th and 18th days, that on the 18th amounted to 0.6 in.

At CARDINGTON, rain fell on the 17th and 18th days, the largest fall was 0.525 in. on the 18th.

At NORWICH, rain fell on the 17th and 18th, the fall on the latter day was 0.37 in.

At HIGHFIELD HOUSE, near NOTTINGHAM, rain fell on the 16th and 17th days, that on the 17th amounted to 0.09 in.

At STONYHURST, rain fell on every day, the largest fall was 0.44 in. on the 17th.

At WAKEFIELD, rain fell on the 12th, 14th, and 16th, on the last-mentioned day, it amounted to 0.14 in.

At WHITEHAVEN, rain fell on every day, the fall on the 12th amounted to 0.58 in.; that on the 14th, to 0.46 in.; that on the 16th, to 0.25 in., and that on the 17th to 0.50 in.

At GLASGOW, rain fell on every day, that on the 12th amounted to 0.55 in.; on the 13th, 15th, and 16th to 0.30 in. on each day.

At DUNINO, rain fell on the 14th, 15th, 16th, and 17th, the largest fall, 0.30 in., took place on the 14th.

At JERSEY, no epidemic is prevalent.

At GUERNSEY, there have been a few cases of scarlatina.

At TRURO, the town is healthy. One case of typhus has proved fatal, and a few others exist. Catarrhal affections usually mild and prevalent.

At EXETER, there is no prevailing disease.

At UCKFIELD, no particular epidemic prevalent.

At BEDFORD, and its neighbourhood, a few cases of typhus, influenza, measles, and erysipelas have occurred during the week, as reported by T. H. Barker, M.D.

At NORWICH, the health of the city is in much the same state as last week. At NOTTINGHAM, there is no prevailing disease; the district is healthy.

At WAKEFIELD, the chief diseases have been diarrhoea, catarrhal affections, and hooping-cough, with a few cases of scarlet fever, measles, and chicken-pox; but the attacks have generally been of a mild character.

At WHITEHAVEN, there is no prevailing disease.

At DUNINO, there have been several cases of jaundice, croup, and influenza during the week.

The weather during the past week has been similar in character to that of the preceding week. The temperature of every day since December 24th has exceeded its average value, and at times by large quantities; during the first three days of the past week, there was a very small difference between the temperatures of the day and night, at all places south of the latitude of 52° N. North of this parallel the sky was less clouded, and the differences were much greater. The difference in the falls of rain at different places is remarkable. The mean temperatures as compared with those last week are higher, but the air was less damp everywhere, the degree of humidity being less.

On the 12th day, south of latitude 52°, the air was equally disturbed, and the mean reading of the barometer at the level of the sea was 30.17 in. At 9 A.M. the reading of the thermometer at Dunino was 42°, and at Truro was 52°.

On the 15th, the mean reading of the barometer north of 53° was 29.56, and south of it was 29.93, and the temperature of the air was alike everywhere.

On the 14th, the reading of the barometer, north of 53°, was 29.40, and south of it was 29.63 in. At Dunino the temperature was 43°, and at Truro it was 51°.

On the 15th, the distribution of the air was remarkable; the reading of the barometer in the counties of Cornwall and Devonshire being 28.88 in. only, whilst at all other places it was 29.30 in. The lowest reading of the thermometer at 9 A.M. was 41.5° at Glasgow, and the highest was 50.0° at Truro.

On the 16th, the reading of the barometer was 29.45 north of latitude 53°, and it was 29.82 south of that parallel. At Dunino the reading of the thermometer at 9 A.M. was 37°, and at Truro it was 51°.

On the 17th, the mean reading of the barometer at Dunino and Glasgow was 29.18; between the latitudes of 54° and 50° it was 29.71, and at Jersey and Guernsey it was 29.88. The reading of the thermometer at Dunino was 41°, at Truro and Jersey it was 49°.

On the 18th, the mean reading of the barometer at Dunino and Glasgow was 29.74, and at all the places south of latitude of 54° was 30.11 in. The reading of the thermometer at Hartwell was 34° 8, and at Jersey was 47°.

JAMES GLASHIER, F.R.S.,

Secretary to the British Meteorological Society.

NOTICES TO CORRESPONDENTS.

Communications have been received from—

DR. SUTHERLAND, Leamington.

ROBERT MARTIN, Esq., Kemerton.

T. J. GREEN, Esq., Ivy Cottage, Peckham.

DR. D'ALQUEEN, Ovington-terrace.

DR. NELICAN, Dublin.

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DR. HUTCHINSON POWELL.

To all these Gentlemen the best thanks of the Editors are due.

HUNTERIAN SCHOOL OF MEDICINE, 1, Bedford-street, Bedford-square.—The Course of Lectures on the GERMAN MINERAL WATERS, commenced on Wednesday, October 30th, is continued every Wednesday, at a Quarter-past Two p.m., by Dr. SUTRO, Physician to the German Hospital.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 5.

LONDON, SATURDAY, FEBRUARY 1, 1851.

SIXPENCE.

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UNIVERSITY COLLEGE, LONDON. FACULTY OF MEDICINE. The SECOND DIVISION of the LECTURES in this Faculty commenced on the 20th January.
Instruction in Clinical Medicine and Surgery at the University College Hospital, by the Medical Officers, and Professors at the College.
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PRINCIPAL CONTENTS:—

1. Dr. C. J. B. Williams on the Examination of the Abdomen in Health and Disease.
2. Dr. G. Johnson on Renal Disease with reference to Diagnosis and Prognosis.
3. Dr. Peacock on the Weight of the Cerebrum and Cerebellum.
4. Dr. Snow on the Inhalation of Medicinal Substances. (Woodcuts).
5. Dr. Sandwith (of Hull) on the Brain in Fever.
6. Drs. Cormack and Semple on the Hospitals of London. No. II.
7. Koelliker's Microscopic Anatomy of Man. (Woodcuts).
8. Digest of the British and Foreign Medical Journals, embracing numerous articles on Medicine, Surgery, Obstetrics, Materia Medica, Hygienics, and Psychology.
9. Reports of the Medical Societies.
10. Miscellaneous News, embracing a copious Obituary, and List of Appointments.

The March number will contain the second article of the series on Medical Education and Medical Ethics.

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69 & 92	His R. H. the Duke of York	7	5,000	962	5,962	19 5 0	2 15 0
1,458	Mrs. N. Hyde	20	400	284	684	71 0 0	3 11 0
5,610	Admiral Sir W. Sidney Smith ...	8	1,700	324	2,024	19 1 2	2 7 8
3,422	The late Duke of Argyll	14	5,000	1,453	6,453	29 1 2	2 1 6
3,604	The late Earl of Clarendon	13½	2,500	1,120	3,620	44 16 0	3 6 4
687	M. S. (Berks) ...	21	400	437	837	109 5 0	5 4 1
1,578	Rev. Thomas Crompton	20	500	350	850	70 0 0	3 10 0
7,828	William Gilles, Esq.	8½	500	197	697	39 8 0	4 12 9
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1,915	Sir John S. Sebright, Bart.	25¾	5,000	3,980	8,980	79 12 0	3 1 10
1,120	Nicholas Doidge	28	100	126	226	126 0 0	4 10 0
1,010	Rev. F. W. Blomberg, D.D.	28	3,000	3,596	6,596	119 17 4	4 5 8
6,059	Rev. Richard Tillard	18¼	1,000	814	1,814	81 8 0	4 9 2
6,630	Ditto ..	16½	1,000	773	1,773	77 6 0	4 12 2
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5,073	James Price	21	200	208	408	104 0 0	4 19 0

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HENRY DESBOROUGH, SECRETARY.

92, Cheapside, August 1850.

LECTURES.

LECTURES ON THE GERMAN MINERAL WATERS

DELIVERED AT
THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

Physician to the German Hospital.

LECTURE VII.
GASTEIN.

GENTLEMEN,—To proceed to Gastein, the shortest route would be to travel directly east until you approach the Alpine Spa, if it were possible to find a beaten path or road leading through all the inaccessible passes and mountains, which you see on the map, separating the two akrotic thermæ. You must, therefore, retrace your steps to the north, and make for the eastern extremity of the Boden-see, viz., Bregenz, after having crossed the Rhine above Vaduz, and passed through Feldkirch. The steamboat will carry you promptly to the north-western Bavarian town of Lindau. By this time the railroad must be completed, which will take you in a north-easterly direction through Kempten, Kaufbeuren, and Augsburg, and south-east to Munich, on the Isar. The considerable distance noted on the map shrinks into insignificance as soon as you see these blessed iron links connecting the two spots. I may here state, by the by, that when you travel in Germany, solely guided by an exact map, you must beware of choosing short routes. Apparent detours, even of a very great extent, often bring you sooner to your destination, if you can use steam for your carriage. For nearly all over Germany, the railroads communicate not only with each other, but with all ordinary land and water conveyances. This circumstance makes a journey through the mingled realms, kingdoms, and dukedoms of Germany, extremely pleasant and expeditious. Wherever you arrive, either commodious hotels tempt you with various luxuries and conveniences, if you desire to halt; or a steam engine hisses with impatience, and flies to convey you to other regions as soon as you have transferred yourself into the appended carriage; or an "eilwagen" stands ready with its prancing horses, promising the greatest "cile" (haste) as soon as you have occupied your seat, though, as you might imagine, after some miles, the horses' zeal is rather cooled through the ruggedness of the road, or possibly through previous work. Nevertheless, you are infinitely pleased not to have shared the fate of another passenger, who preferred the shorter route, and just arrived at a little village a few minutes after the train or boat had left, by which short time, however, his destination may have become some hundreds of miles removed. We must accustom ourselves to cease reckoning distances by miles, when we can so easily travel during our sleep, and find ourselves so near our destination at waking in the morning.

From Munich, the eilwagen starts every afternoon, through the south-eastern Wasserburg, Stein, and Waging, and arrives at Salzburg on the Salzach* at half-past six the following morning, in time for the Gastein diligence, which receives the passengers half-an-hour later. The distance from Munich to Salzburg is 35 leagues. A more interesting and not much longer route is preferred by many tourists, viz., to bend more to the south-east, and pass through Rosenheim, where celebrated saltworks are to be seen, with an extensive prospect of the environs. Thence you might proceed towards the beautiful village of Prien, and cross the interesting Chiemsee (four leagues long) in a steam-boat. A very picturesque perspective is offered on the lake, of the romantic ruins of Hohenaschau, of the Kompenberge, and the high Hochgern (rising to 6,000 feet). You proceed then to Traunstein, on the Traun, also provided with saltworks, then through Teisendorf to Reichenhall, on the Saalach, the centre and connecting point of four large salt-mines. The "Soole" is conducted hence by subterranean pipes to the northern Traunstein, and to the north-western Rosenheim, whilst the place receives the "Soole" from the southern Berchtesgaden. The salt works are greatly admired by the visitor.

The Grabenbach (ditch-river) is particularly worthy of notice. It is a deep subterranean canal, built of brickwork, and destined to receive such sources of the Soole as contain too small a quan-

tity of salt. The curious are carried in boats as far as the river. Though the Ferdinandsberg of Berchtesgaden lies 160 feet higher than Reichenhall, the salt-works had to be artificially raised by water columns to a height of 179 feet more, in order to fall to Reichenhall; wooden and iron pipes extend to upwards of 100,000 feet between the two "Salinen." The "Soole" arises here at a depth of fifty feet, and is pumped up by machinery. One part contains such an abundance of salt, that it is immediately transmitted to the boiling-pans without previous graduation. A most charming road leads from this place through the Ramsau to Berchtesgaden (seven leagues south of Salzburg.) You pass between high and interesting mountain walls to the Taubensee, and soon afterwards to the village of Ramsau. The valley now enlarges, and the road passes the "Illangnühle," where Reichenbach's celebrated water-lifting machines are seen, which raise the saturated "Soole" with a cylindrical pressure, in pipes 3,500 feet long, and 1,200 feet high. A league and a half further you reach the charming and picturesque Berchtesgaden, with an antique chateau, annually visited by the King of Bavaria. The salt-works here offer great interest. In the little chateau of Adelsheim, you may inspect the "Klausnerische" collection of ivory and wood-cut wares of Berchtesgaden. The most magnificent views are furnished by the "König-see," (King's Lake,) south of Berchtesgaden. The encircling high cliffs impart to the whole a solemn grandeur. The water is dark green, but appears quite black near the shore, through the overhanging rocks. At the end of the lake a smiling meadow suddenly opens to your view, with a hunting-castle at the foot of the towering Watzmann (9,000 feet high). With a powerful telescope you can perceive the chamois jumping along the glaciers. Good pedestrians may easily wander from here to the "Eiscapele," the lowest glacier in existence. The "Schreinbach," falling into the König-see at the southern extremity, with its white foam, forms a curious contrast with the dark water of the lake.

During the presence of the court, grand stag and chamois hunts take place on the lake, the animals being driven into the water from the neighbouring mountains. A short walk towards the north brings you to Salzburg. I dwell with greater length and emphasis on this journey than on others, because it forcibly struck me as I proceeded, that such varieties of scenery, such contrasts of atmospheric influences, acting on the senses and faculties of the traveller, must exert a positively healing action in many derangements of physical and mental functions. I defy the hypochondriac to think of his manifold and magnified sorrows, when beholding these wonders of creation. The secreting and excreting organs resume their former healthy activity. The formation of good chyle improves the condition of the blood. The nutrition of the whole frame becomes improved, and reacts tonically on the mind; and thus this cyclus of cause and effect eradicates many an inveterate functional disorder. I do think that travelling certain routes should be advised in many instances merely for the sake of the journey itself. On this occasion I proceeded from Munich to Kreuth, which I may yet visit with you, if time permit, thence to Schwatz, on the Inn in Tyrol. From this interesting locality to Salzburg the diligence starts about midnight. The scenery which day-break revealed induced the following remarks in my journal. "I sat outside in the morning, near the postillion, to inhale God's free air and admire his variegated beautiful landscapes. How I rejoiced at the delightful panorama, that opened before me. On both sides of the road beautiful meadows gently rise and abruptly terminate in the mountains, whose rocky summits are sometimes seen rising behind each other, forming extremely romantic and picturesque perspectives. The beautiful town of Salzburg lies in the centre of the so called 'Salzkammer gut' (salt-chamber-domain) bounded on three sides by mountains, and divided into two parts by the rapid Salzach, which is provided with a large bridge. The town contains 15,000 inhabitants and lies in a valley between the Mönchsberg and Capucinerberg, from which you enjoy magnificent views of the environs. The 'Festung' (fortress) of Hohen-salzburg lies on a commanding position, overlooking the whole town. If you take a survey of the town from that eminence, it appears more charming than it really is. I next visited 'Aigen,' beautiful and park-like, full of grottoes, waterfalls, rocks and labyrinths. A spot is pointed out here by the guide as the favorite resort of his Majesty King Louis of Bavaria, who is certainly an excellent judge of picturesque scenery, for it becomes difficult to satiate your sight with the alternating heights and valleys, glaciers and castles, that arrest your eyes from different points. Amongst the numerous curiosities, well worthy of inspection, I was particularly struck by the cemetery of St. Petri and its antiquarian monuments, by the interesting gate hewn through the rocks with the proud inscription 'de

* The Salzach arises above 47 lat. and 12 east long. at the east of Innsbruck; it then takes a due easterly direction as far as Lend, where it is entered by the Ache, which originates in the south, from the towering Ankogel, passing Bad Gastein and Hof Gastein. From Lend the Salzach bends to the north-east, leaving Saint Johann on the right, Werfen on the left, Golling on the right and Hallein on the left shore. It then traverses Salzburg, passes Laufen, then turns slightly to the west, and joins the Inn east of Munich, to fall with that river into the Danube at Passau.

Saxa loquentur, &c. But however imposing and romantic the views at a distance, the streets are narrow, and the houses apparently damp and close, though the place is alleged to be very healthy. Of the great purity and salubrity of the air in the environs there cannot be the slightest doubt. At 7 A.M. I took my place in the diligence and passed through Hallein, Golling, Werfen, St. Johann, Lend to Hofgastein, (where we arrived at half-past 8 P.M.) and Wildbadgastein (at half-past 10 P.M.), about 32 leagues in 15½ hours. The road, particularly after Golling, is magnificent beyond description. It is more like a fairy-land than a reality, particularly the 'Lueger-pass,' where a small path leads upwards to the 'Ofen der Salzach' (Ovens of the Salzach, so called because the Salzach breaks here through ovenlike rocks) and is certainly the most magnificent view that the imagination can conceive. It is the perfection of picturesque scenery. The spot which struck me as most admirable, is where the Salzach-bridge stands surrounded on all sides by the mountains, as if the world were locked off beyond, and all further passage prevented. And if you now think your admiration has reached the highest point and that greater natural beauty cannot exist, pass on further and you will find how mistaken you were in this belief. Rocks, mountains, valleys, verdant fields and deep ravines perpetually diversify the scene, while the Salzach coquettishly winding every now and then across your path, and forcing you to cross and recross her silvery current, contributes to render the whole scene so charming and heart-expanding, that none can forbear blessing his Creator, and pouring out his overflowing gratitude."

Gastein, lat. 47, long. 13.—The valley of Gastein is intersected in its whole length (for 11 leagues), by the rapid Ache, which rushes down from a height of 270 feet in the middle of Wildbad, forming one of the most beautiful waterfalls. The spa is supported on the side by the terrace plain of the Bockstein. On the north a fine prospect opens towards the whole lower valley, whilst on the east and west, mighty columns of primary rocks are perceived, the Tisch, Gamsgarkogl, Thronegg, Graukogl; towards the south, the high plain of Bockstein. The spa lies 3,200 feet over the level of the sea, its filial establishment Hofgastein, nearly 2700 feet, thus 500 feet lower. The highest peak of the Gastein mountains, joining the southern towering chain, with their snowfields, as the Ankogl, Kreuzkogel, Mareck, &c., reach a height of from eight to 10,000 feet.

The mean annual temperature is 7° Reaumur; that of the summer, 11° to 12°, being rather lower than in many other spas. Nevertheless, the climate is more bracing than rough, for the northern storms, as well as the pluvial west and north-west winds, are kept off by the semicircular guard of the surrounding mountains. The easterly winds are partially checked in their violence, by passing over the Arleck and the mountains of the Kotschach valley. Even the Sirocco from the south, which has such a depressing influence on the nervous system, and mostly appearing in Spring and Autumn, is deprived of its violence, by the towering chain, and partly of its heat, by the ice and snowfields of the environs. West-south-west wind is the most frequent. The heat of the summer is rarely oppressive, rapid alpine torrents and neighbouring woods imparting freshness to the atmosphere. The temperature is occasionally exposed to sudden changes in the height of summer. If any tempest discharges itself in the mountains above, rain and cold ensue in the valley as a consequence, with a cloudy appearance of the atmosphere. This becomes sometimes more perceptible through the evaporation of the glaciers, after very great heat, as for instance, when the thermometer had risen to 20 and 24° Reaumur. The spring exhibits fewer changes, and is more adapted for courses of the water than is generally supposed. The excellence and purity of the natural alpine spring water, colder in summer and warmer in winter than the atmosphere, is considered so advantageous as to be often made use of medicinally in indigestion, and a weak condition of the mucous membrane of the intestinal canal. The air absorbed by the ordinary water contains 30 vols. of oxygen to 70 of nitrogen. The spring water may partly derive its stimulating and decarbonising influence from this increased proportion of oxygen. You are aware, however, that water generally contains a greater quantity of oxygen than of nitrogen, so that you have always to expect an increased proportion of the former even in common water. You will recollect that 100 vols. of water absorb about 6 of oxygen and 4 of nitrogen. The barometric pressure is diminished by more than 3 inches (24" 5"). Thus if the whole weight of the atmosphere borne by one individual is equal to 14 tons = 28,000 pounds, one inch corresponding to 1,000 pounds, a diminution of nearly 4,000 pounds exists in Gastein. The atmosphere is consequently purer, lighter, and (as it is asserted) more charged with positive electricity in proportion. The influence of light is also

supposed to be more enlivening and stimulating by passing through a less resistant and more attenuated aerial medium. It is thus assumed, that in such alpine heights pulmonary circulation, and in consequence arterialisation of the blood is accelerated, and the quantity of venous blood proportionally diminished.

From the above reasons you see the animal and vegetable kingdoms develop greater strength and vitality in these heights than in the lower regions. The beneficial atmospheric influence is particularly felt by persons coming from flat countries, from the shores of the North and Baltic sea, &c. An unusual ease spreads over the whole organism, respiration is more easily performed, the head is raised, the walk is erect, with a certain lightness and elasticity of movement. An instinctive desire for muscular exercise helps to increase the general effect, and induces keener appetite and sounder sleep. The necessity of a certain amount of oxygen must induce deeper inspirations than in low localities, where the compressed air contains a greater quantity in a smaller volume. Patients with weak thoracic organs feel in such heights at first a certain oppression, they have a sensation as if they could not obtain a sufficient quantum of air. This, however, enforces a gradually increased expansion of the chest, and deeper inspirations. On this account tubercular diathesis, for instance, is so greatly counteracted by Kreuth, because the greater dilation of the pulmonary cells mechanically prevents further or incipient deposits in the interstitial tissue.

The venous blood being allowed freer reflux by the promoted circulation, obstruction of the portal system is diminished. The intestinal canal exhibits greater tone. Exhalation proceeds with more activity. General nutrition must therefore improve. On the other hand, in confirmed phthisis, or congestion of the brain, or internal inflammation, alpine air must be injurious. The increased pulmonary action occasions a speedier exhaustion of the lungs, whilst the stimulated vascular arterialisation heightens the inflammatory symptoms.

The spa has been in repute for centuries. Its annals state:—"that more than 400 years ago (1436), the Emperor Frederic the Third used it for an open sore in his thigh, and left it completely cured." The bath hospital was founded nearly 400 years ago for indigent patients. Paracelsus said of Gastein, more than 300 years ago:—"it opens scars, cures paralysis, dispels contractures and gravel."

Baths are erected in every house destined for the accommodation of the visitors, with a reservoir of thermal water, possessing the requisite temperature for bathing. The "Badschloss," Straubinger, &c., possess large baignoires for persons wishing to bathe in greater numbers. The more modern buildings, however, possess merely separate baths, as spaciouly and conveniently constructed as possible, so that the patient can move about and be in constant contact with a great amount of thermal water.

Apparatus for douche, shower, and rain baths are attached to all these localities.

Wildbadgastein offers several shady walks to the visitors. Excursions to the Bellevue, or the "Russian coffee-house," furnish fine prospects of the immediate neighbourhood.

Active pedestrians will be well rewarded for walking to the castle of Hundsdoerf, with the charming perspective of the Graukogl, Gamsgarkogl, a glacier, lying between the two (the Tischlerkaar) and the Ankogl. Others wander to the neighbouring mines of Bockstein, celebrated for the gold-washing performed there. The "Schweizerhaus" (Swiss-house), situated between Wildbad and Hofgastein, collects visitors wishing to combine enjoyment of fine scenery with social amusement and rest. In the neighbourhood is also to be found the "English coffee-house," with a fine view of the valley, besides "Badbrück or Fatscherghaus," with its neat pond of trout. For further excursions, the Anger Kotschach and Anlauf valley are chosen.

If unfavourable weather prevents out-door exercise, the guests avail themselves of the beautiful "Wandelbahn" (wandering path), upwards of 400 feet long and 20 feet wide, where you can not only walk about at your leisure, but enjoy charming prospects, and amusing contemplation of the various groups formed round tables in different parts of this capacious locality. At certain hours of the day delightful music heightens the pleasure of muscular exercise.

The character of the mountain masses is primitive. The healing sources originate out of gneiss, at the foot of the mighty Graukogl, on both sides the Ache. Towards the elevated southern Bockstein, granite formation appears, whilst towards the northern valley, near Badbrück, glimmerslate is found, characterizing the Gamsgarkogl and neighbouring mountains. The declivities of the mountain masses, at the east and west of Wildbadgastein, are superposed by strata of primary rocks, while the deeper valley of Hofgastein is partly covered by the rocks of the surrounding

mountains, and partly by alluvial conglomerations. These primitive mountains formerly concealed numerous minerals in their womb, particularly gold, which was obtained to a considerable amount; but now the gold-washing is performed less for profit, than to satisfy the curiosity of the visitors.

The order in which the sources arise are, 1, the highest, *Fürstenquelle*, 37° Reaumur = 115½° Fahrenheit, furnishing 16,000 cubic feet of water in twenty-four hours, and supplies the baths of the Archduke Johann, those of Straubinger, of the Prälat, Solitude, &c.

2. The *Doctorsquelle*, lower and more northerly, 36° Reaumur = 113° Fahrenheit. About 3,000 cubic feet of water are furnished daily, and conducted by levers into the Badeschloss.

3. The *Schröpfung*, or *Chirurgenquelle*,* still more northerly, temperature 36° Reaumur = 113° Fahrenheit. The daily quantity of water is below 4,000 cubic feet, and supplies the baths of the surgeon.

4. *Hauptquelle* (chief source), the lowest, but, at the same time, the most abundant. A new enclosure of brickwork leads to its issue. The temperature of the bubbling spring is 38½° = 118½° Fahrenheit, its daily quantity 100,000 cubic feet. It supplies the baths of the Mitterwirth, Krämer, Bath-hospital, and the filial establishment of Hofgastein. The vapours evolved from the water are conducted into a separate locality, and used as vapour baths.

There is besides on the right shore of the Ache the *Ferdinandsquelle*, with 33° Reaumur; then the *Wasserfallquelle*, with 28° Reaumur; and on the left shore of the Ache, the *Grabenbächerquelle*, with 29° Reaumur. The water is clear, inodorous, and tasteless. Specific grav. 1.004. It is composed of

- 1.51 sulph. of soda (1½ gr.)
- 0.36 chlor. of sodium (about one-third).
- 0.36 carbonate of lime (about one-third).
- 0.05 carbonate of iron (one-twentieth gr.)
- 0.24 silex (about one-fourth gr.)

with a small quantity of sulphate of potash, carbonate of soda, of magnesia, and *glairine*, amounting together to 2.73 grains in 16 ounces. 100 parts of the gas contained in the water, consist of 3.8 carbonic acid, 29.0 oxygen, and 65.1 nitrogen; 100 parts of water contain 0.18 of carbonic acid, 0.90 of oxygen, and 2.02 of nitrogen. The following experiments have been made to compare its power of conducting electricity with that of common, or distilled water.

1. Distilled water of the temperature of 14.1° Reaumur, caused the needle of the galvanometer to diverge to 3½°.
2. Gastein water, kept nineteen days in an open bottle with a temperature of 14.4° Reaumur, induced a divergence of 29°.
3. Fresh spa water of 24.4° Reaumur, made the needle diverge to 36°, whilst
4. Distilled water warmed to the same heat, caused a divergence of 6° only.
5. The above-mentioned Gastein water, which had been cooled to 14.4°, being heated likewise to 24.4° Reaumur; the divergence of the needle was 36°.

From the above and many other experiments, it is inferred that the water possesses a greater degree of electro-motor power than well, or distilled water, as a combined result of its alkaline constituents and thermal temperature.

It is thought that owing to the spa water being heated in an enclosed space, beyond atmospheric influence, and without formation of vapour, the warmth penetrates all the particles more uniformly, touching each separately as it were. In water, however, heated by artificial fire, and exposed to atmospheric influence; the warmth is spread by the circulation of the watery particles themselves, so that the calefacient power does not so uniformly act on each atom.

The fact of oxygen possessing magnetic power, lately established by Faraday, may also assist in explaining the great importance of a high position. The same savant has proved, that not only heat, but carbonic acid, and other gases, diminish or destroy this magnetic power. Thus we may consider, that in low situations, the protective magnetic force of oxygen is counteracted, both by the warmth of the circumambient animal exhalations, and by the exhaled gaseous bodies. The diminished magnetic tension may then give greater scope and freedom to the development of miasmatic impurities in the atmosphere, which react again in their turn, on the living beings from whom they had originally emanated.

Though the temperature of the chief source is only 38½° Reaumur, a sufficiency of vapour is evolved for use. From each layer, as it rises, issues a quantity of steam, whilst in boiling

water only the superficial layer develops steam, and must constantly be supplanted by a deeper layer rising from the bottom.

A whitish-grey gelatinous substance, gradually assuming a denser tissue, is observed at the bottom and sides of the effluxes, forming the Gastein bath-mud (*ulva thermalis*).

To the supposition that climatic influences alone produce the observed changes, it is objected, that the inhabitants of Gastein are often affected with the fever of reaction, when using the baths, whilst this is never observed as regards persons bathing in the well-water of St. Wolfgang, warmed to 28° Reaumur, in the neighbouring Fusch-valley, which lies 800 feet higher than Gastein. The above analysis shows sulphate of soda to be the chief constituent, with a small quantity of chloride of sodium, and carbonate of lime. I again present to you a close approximation. You have to bear in mind, that the constant renewal of the water, together with the great quantity provided for each bath, may cause a proportionally greater absorption of the ingredients.

The baignoires are from four to five feet deep, and hold from 150 to upwards of 300 cubic feet of water, that is from 8,500 to 17,000 pounds, and containing from three to six pounds of sulphate of soda; other mineral substances are dissolved in it. These constituents being presented to the absorbent vessels in such a highly diluted condition, are fit to become absorbed and assimilated.

The bathing basins are constructed of wood, and communicate both with the reservoirs and sources, so as to admit of a constant renewal.

A feeling of general ease permeates the bather; greater elasticity of body and mind is perceived; the circulation becomes more active, the pulse somewhat fuller, and occasionally more frequent. If the stay is prolonged to an hour, relaxation ensues, sometimes a slight chilliness, inclination to sleep, and other signs indicating the necessity of leaving the bath. A short repose on the bed after leaving the bath, brings out a pricking sensation of the skin, particularly in such parts as have been subjected to gentle rubbing. Perspiration is rare.

Healthy persons, after bathing for several days, feel stimulation of the vascular and nervous systems, increased frequency and strength of the pulse, sometimes even giddiness, aridity of the skin, restlessness, and diminished appetite. To plethoric persons in general, Gastein is less appropriate than for weakened and anæmic individuals.

Derangements based on vital inactivity and torpor, or on disturbed dynamical functions of the cerebral and spinal nervous system, will find a fitting remedy in Gastein. After the first seven or ten baths the appetite improves, sleep becomes sounder, pulse and complexion more lively, and the general functions of the muscular and sero-fibrous organs increased. If still continued, reaction sometimes appears with the usual characteristics, as relaxation, lassitude, headache, mental depression, anorexia, obstruction, &c. Sometimes these phenomena augment to febrile orgasm, when the course should be discontinued for a short time, till the erethism has passed off with salutary crises. This reaction varies in its time of appearance, between the ninth and twenty-first bath. Old rheumatic and arthritic pains often reappear during the course, dormant neuralgiae are roused, and old scars and paralysed parts become painful.

The solvent power of the spa in inveterate swellings and indurations, is subordinate to its dynamical and alterative effect on nervous vitality.

The cutaneous system, having become more susceptible by the alpine character of the place, is particularly prone to critical results. Glutinous perspiration sometimes covers the affected parts.

After a certain duration of the course, the back, abdomen, and extremities are occasionally affected with a bath eruption, of either a papular or vesicular character. The bath is to be continued till the eruption disappears, unless accompanied by fever or erysipelas, when discontinuance of the course is necessary.

Renal crises are the most frequent; the urine first becomes watery and more abundant, afterwards sedimentous, and particularly charged with deposits in rheumatic and arthritic diseases, and in lithiasis.

Critical stools after reaction are more rare. The regular flow of hemorrhoids sometimes follows the course and removes internal diseases, which had been produced by its suppression.

Satiety is generally evinced after the twenty-first bath, and requires cessation of the course. In some instances, however, it is put off for a longer period; particularly with very torpid persons the desire for bathing in some instances continues longer. Mostly, however, after this period the baths are taken with reluctance and discomfort; the mind becomes peevish and excited

* Cupping bath, or Surgeon's source.

short walks are fatiguing, sleep becomes disturbed, appetite diminished, tongue furred, &c. These symptoms suggest discontinuance of the course, for if prolonged, signs of over-bathing will be superadded, viz., palpitation of the heart, oppression of the chest, giddiness, restlessness, chilliness, and at last real fever, which greatly differs in character and intensity from the curative fever of reaction, and requires immediate suspension of the baths, besides careful medical treatment.

Frequently the curative effects of the spa are only exhibited some months after the patient has left the Alps, and returned to his occupation. If no decided indication exists, it would be advisable to leave nature free scope for developing its commenced alteration. The course sometimes merely incites the *vis medicatrix nature*, which then gradually progresses till the morbid cause is expelled.

Gastein is recommended—

1. *In chronic rheumatism*, arising through gradual suppression of insensible perspiration, and often inducing metastases to internal organs, or combined affections of the nervous system, as neuralgic and spasms, or rheumatic paralysis. Contractions and stiffness of the joints, if based on rheumatic causes; and rheumatic pains, induced by mercury or other metals. Rheumatism ensuing after the administration of large doses of bark, particularly when these have quickly suppressed periodical half-sided head or face-ache. In morbidly increased sensibility, the lukewarm baths are used; in great torpor, the warmer ones. The perspirations induced after a certain number of baths, display acid smell and reaction. Repelled particles are mobilised, diluted and dissolved, by the stimulus of the congenial fluid. Urinary secretion shows after some time in its sediment, increased urate of ammonia. In articular rheumatism, the pains sometimes become extremely violent through using the baths, but only to be followed by soothing effects.

2. *Gout, gravel, piles*, more particularly in anæmic and decrepid persons, with nervous weakness, or such as have been exposed to harassing mental work, with meagre and not sufficiently strengthening diet. Those persons will be less benefited, who possess a plethoric disposition, considerable sanguineous plasticity, or who live luxuriously whilst leading a sedentary life, or where there is a natural tendency to expel the morbid matter through the abdominal organs, and where material engorgements are present. Here the cooling and solvent springs of Marienbad, Franzensbad and Kissingen, will be indicated in some instances, in others, the penetrating thermæ of Karlsbad, or Wiesbaden. Gastein is in such cases often resorted to with great advantage as an after cure, to raise the nervous power, after the exhausting material eliminations.

3. *Atonic, erratic gout*.—Regular local paroxysms of gout are not cured in Gastein, but their frequency and violence is diminished, by partly preventing new deposits of arthritic concretions. Gout in the articular apparatus of the vertebral column, characterised by dull dorsal pains, and increased by motion, is particularly amenable to the baths and vapour-douche of Gastein. In *arthritic ankylosis*, when the synovial membranes are filled with uric or calcareous sediments, from deficient organic power of transforming these substances, when the skin and kidneys have diminished their secreting activity, the internal and external use of Gastein is very useful. Diarrhoea, through arthritic dyscrasia, also gonorrhoea from the same cause, are relieved here.

4. *Renal Gout and Lithiasis*.—Gastein is reputed for expelling sand and gravel. When repelled podagra has produced the evil, the disease becomes localised again through the baths. Nervous gout, ischias nervosa, gonorrhoeal gout, prosopalgia of rheumatic or arthritic origin, also if purely nervous without organic change, neuralgia brachialis, plantaris, &c., are all enumerated amongst the category of diseases curable by Gastein.

5. *Writer's cramp** is very often cured here. Habitual spasms of the stomach and colic are only relieved in persons of great nervous weakness, or in atony of the digestive organs. In debility of the abdominal nervous plexus after cholera; in trembling of the limbs, produced by general cessation of strength in old age, &c., the power of the spa is extolled. *Somnambulismus*, based on predominant nervous irritability of the uterine plexus, with prostration of the central nervous system, is often relieved here. A case is recorded by Dr. Kiene of a young lady of 17 years of age, who was completely cured by a course of twenty-one baths. The first day the temperature was 23° Reaumur, and the stay in the bath five minutes; the next day, temperature 24° Reaumur, and stay ten minutes; the following day, 25° Reaumur, and a quarter of an hour's stay, and all the following, 25° Reaumur, of half an

hour's duration. On the fifth day the paroxysm re-appeared, but weaker; again on the ninth, with still less violence, and subsequently none.

6. As regards *diseases of the spinal marrow*, Gastein is not indicated, when inflammation, suppuration, or fever is present; but where exhaustion of nervous power, through excessive losses or weakening diseases, takes place, Gastein is eminently curative. Spinal irritation and hyperæsthesia, paralysis of the lower extremities, pure nervous weakness, marasmus senilis, spermatic weakness, morbid atonic perspirations, spina ventosa, rachitis, *coxarthrocoace* (luxatio spontanea), chlorosis, tendency to abortion, sterility, atonic, arthritic and scrofulous ulcers, caries of rheumatic or arthritic origin, varicose ulcers, ulcers through contusions, &c., are all asserted to find frequent cures at the spa.

Gentlemen,—The above array of maladies might easily provoke a smile of incredulity. "What," you will say, "does Gastein exhaust all these classes of pathology? how can the same remedy cure diseases so diversified in their nature, appearance, and character. If it be decidedly able to heal the one, it must prove inert, or even injurious in the other."

You have to bear in mind, that a spa of such mysterious properties serves as a last resort in many cases where the ordinary remedial store has been exhausted in vain. Persons suffering with the variegated derangements enumerated, have, no doubt, found relief there. The scientific standing of Dr. Kiene, who enjoys a high repute in Germany, and who practised at the place for nineteen years, sufficiently guarantees the truthfulness of his accounts.

But the question between certain diseases cured there, and what patients you should rather send to Gastein than to other spas, is widely different. Many a sufferer is relieved from disease under a course of certain pharmaceutical remedies, and yet we may hesitate to ascribe the cure to their agency. I might just mention an instance: an out-patient of the German Hospital, the wife of a policeman, was affected with impetigo on both cheeks, on the forehead, and on the nipples of the two breasts. In all other respects she was perfectly healthy. Age between nineteen and twenty—in the fifth month of pregnancy. Not the remotest sign of dyscrasia was present. The impression was altogether that of a well-proportioned healthy person, with very dark hair. There being no decisive indication, I gave her a solution of sulphate of soda with a view to keep up a gently increased action of the liver and portal system. Improvement taking place after a few weeks, I saw no reason for changing the treatment. She took nothing else in the shape of either internal or external medicine for three months, and now she is completely cured. Still I would not venture to state or to think, that sulphate of soda cured her, though a very obstinate case of ecthyma faciei of an in-patient who had in vain taken arsenic and Donovan's solution, was cured under the influence of the same remedy.

May not a similar result happen in various spas? Many a cure may take place through secondary circumstances, and as I mentioned formerly, I have made it my chief task, to point out those ailments in which such or such springs are primarily indicated.

The *ensemble* of Gastein adapts it to those chronic diseases in which the nervous system has been peculiarly weakened or altered in its function. We have to consider the three media, from which curative influences may ensue. The inherent caloric, the constituents, and the bracing alpine air with its diminished atmospheric pressure.

I need not tell you what a great number of nervous affections are daily produced by repelled gout, or by retrocession of piles, or of cutaneous eruptions. The general increase of peripheral functions, inducing a derivation from the internal organs, may act healingly in one instance. The roused torpidity of the nervous centres is apt, in another instance, to call dormant organs into fresh action, and to elicit embedded particles from their obnoxious position.

In a third instance, the great quantity of the highly diluted warm fluid, with its sulphate of soda, chloride of sodium, carbonate of lime, and of iron, may enter into combination with the circulating organic liquids, and partially dissolve stagnant substances, and fit them for elimination. The decided utility of Gastein in gravel would lead to this supposition, for its composition bears some analogy to Karlsbad, where also sulphate of soda forms the chief constituent, and where chloride of sodium and carbonate of lime are in subordinate quantities with carbonate of soda.

In conclusion, gentlemen, I shall quote a few lines from my journal.

Aug. 17th.—I was much disturbed the whole of last night by the roaring waterfall of the Ache. Dr. Kiene, whom I saw in

* I have myself travelled with a gentleman who was completely freed from this evil at Gastein.

the morning, considers Gastein particularly efficacious in torpor of the nervous system, paralysis, erratic gout, premature age; in fact, whenever spasms or paralytic affections are produced by deficient nervous power, Gastein cures by raising this power.

I walked from Wildbadgastein down to Hofgastein (about one hour and three quarters), although it rained; the walk was very romantic and extremely picturesque.

The water of the chief spring is about 39 degrees of Reaumur in Gastein; it is allowed to cool over night, or cooled and thermal water are let from two cranes into the bath, which thereby acquires the desired temperature. From this chief source the water is conducted in wooden pipes down to Hofgastein, where it arrives, according to atmospheric temperature, with a warmth of somewhat above or below 30° Reaumur. Then it runs constantly out of cranes into the baths, which are lowered to 28° or 27° Reaumur by standing a few hours.

Dr. Sletting (practising at Hofgastein) considers it advantageous in the filial establishment that the water does not require cooling, that the climate of Hofgastein is milder and dryer than the parent spa, possessing the sun three hours longer every day (which must be considered very beneficial in nervous diseases.) The walks are more level than the mountainous regions of Wildbadgastein. It is more accessible, but less comfortably constructed; in fact, the locality seems rather neglected and actually looked down upon by its elevated parent. Dr. Sletting related to me several cases of cramps of the stomach, which found a permanent cure at his spa. Also some cases of sterility, which had been relieved, and of paralysis through spinal concussions and wounds, and spasmodic diseases that had been cured at Hofgastein. Sal. H., of Danzig, who suffered from a kind of chorea (viz., fits of bellowing and imitating various animals) was completely restored here. Schönlein sent to him a remarkable case of an affection of the *nervus vagus*—viz., by seeing others eat the patient got violent pains in the epigastrium, which spread to the throat and impeded deglutition. Varicose ulcers are also often cured there. The pores become contracted in the bath, the skin paler. Perspiration never ensues, whilst diuresis is invariably increased, and Dr. Sletting laid particular stress on the *sound critical sleep* that is enjoyed by nervous patients. He also mentioned a case of diabetes mellitus, where perspiration regularly ensued at night, the quantity of urine diminished two-thirds, strength increased, and the patient left greatly relieved though not cured. As regards lithiasis, particularly in the phosphatic diathesis, it frequently finds relief in Gastein.

I spoke with a commandant in the free military bathing establishment, who was cured of pain and stiffness in the right femur, where he had been wounded by a ball. I saw many persons who had been cured from traumatic stiffness and spasmodic contractions.

How is then the indication to be fixed, and the choice to be made between the three akritic spas visited?

Wildbad is more indicated in *arthritis nodosa*, and in those cases of paralysis and contraction where arthritis is to be promoted, and where resolution of effete concretions and deposits are the chief task of the healing process.

Pfäfers is rather useful in *atonic, metastatic gout*, in hemiplegia after apoplexy, and in paralysis connected with the absence of *true* nervous sensibility, also when the disease is more the immediate effect of the concussion or lesion of muscular tendons or nervous centres.

Gastein however is more indicated in irregular and depraved nervous action, based on atony. Therefore, it is eminently useful in writer's cramp, spasms of internal organs, affections of the *nervus vagus*, *trigeminus*, &c., paralysis with great general torpor, and deficient calcification. The water increases the tone of the nervous system, and regulates its power. Persons with seminal weakness, whose irritability had been increased by sea-baths, were cured here, by the increased erectile power, and testicular contraction following the use of the baths; with restoration of the exhausted nervous vitality."

I trust then, gentlemen, that in the generality of cases, by taking all the above points into consideration, you will have no difficulty in deciding to which of the three springs you have to recommend your patient, but first of all decide if he is able to undertake such a fatiguing journey; and whether you think that his particular ailment may not be cured at home in the bosom of his family, or within the bounds of his native land.

(To be continued.)

ORIGINAL COMMUNICATIONS.

DR. RADEMACHER'S THEORY AND PRACTICE.

BY DR. D'ALQUEN.

(Continued from volume 1.)

REMEDIES FOR SEPARATE ORGANS.

THE difficulty of finding special remedies for diseases of the different organs is very great, as we can gather this information only from the treatment of cases in which the diagnosis is clearly made out; and as some organs are more frequently affected than others, we have sometimes to wait for appropriate cases, and it necessarily requires not only a close observation and comparison of a great number of cases, but also the most persevering industry, patience, and time, before the real value of a remedy in a given disease can be satisfactorily ascertained. However objectionable the theoretical notions of Dr. Rademacher may appear to some, the value of a remedy is a matter of simple experiment, unaffected by the peculiar notions which dictated its administration; it is generally admitted that too little attention has been bestowed of late upon the empirical experience of the effects of remedial agents. There is a great field open for reform. One of your contributors, in an article on the use of belladonna as a remedy in scarlet fever, justly observes, "The virtues of many vegetable bodies, well known to the more ancient practitioners, have been temporarily forgotten, because they would not fall into any place in favourite systems. In my opinion, we have not yet attained to the point in physiology and pathology which renders any arrangement of remedies, other than an alphabetical one, either advisable or safe." Under these circumstances, I confidently recommend the following practical details to the consideration of the reader, as a step in the right direction.

ABDOMINAL REMEDIES.

I will first mention two remedies which act in a manner equally salutary, both on the liver and on the spleen. These are the *Semina cardui Mariæ* (milkthistle), and *Durand's drops*. In speaking of the former, our author says:—"It is of the greatest service in sympathetic spitting of blood, which often accompanies chronic affections of the liver and spleen. In the whole materia medica we have no other remedy which so quickly removes this unpleasant and alarming symptom. In many acute hepatic fevers which are of frequent occurrence, accompanied by pleuritic pains, spitting of blood, &c., I know of no remedy to compare with the Card. Mar. It has likewise proved effectual in hæmorrhages from the uterus and nose which depended upon a primary disease of the liver or spleen. Many chronic coughs connected with diseases of the liver or spleen I have cured with it, when they resisted the long and continued treatment of other practitioners. I must, however, call the attention of the young and inexperienced reader to the circumstance that in cases of hæmoptysis or coughs, arising from a primary disease of the liver or spleen, above all things the primæ viæ must be cleared of any acrid or acid matter which might have been accumulated in the intestines, before the abdominal remedies can exert their beneficial effect. The best mode of giving the Sem. Card. Mar. is in the form of a tincture, which is prepared in the following way:—

Rx Sem: Card: Mariæ non contusi
Spirit: vini rectificat:
Aque destillat. singulorum ʒv.

Digere vase clauso per octo dies, sæpe agitando, tunc exprime et filtra. Sit limpida coloris subfusci.

The dose is from 15 to 30 drops in a little water or milk, five times a day. In a sympathetic diarrhoea, however, depending upon a primary affection of the liver or spleen, the dose ought to be much smaller. I must also mention that it is one of the best remedies for alleviating the distressing symptoms and pains resulting from the presence of gall-stones, the diagnosis of which is not always an easy matter. It is, in general, prudent in all affections of the bowels, whether they fall under the head of cardialgia, colic, or otherwise, to ascertain the *place* where the pain was *last observed* while abating, and *here*, in most cases, is the seat of the primary affected organ.

The best remedy on record for the removal of gall-stones, is Durand's drops:—

R̄ Liquor: anodyn: Hoffm.: ℥j.
Olei Terebinth: rectif: ℥ij.

Mix. Dose; from ten or even five drops in half a cupfull of water three times a day, and increase slowly or quickly as the patient bears it. Often, immediately after taking it, the patient experiences a pain in the liver, which lasts for a minute or two. Although this symptom is of no consequence, and, on the contrary, desirable, the dose ought not to be increased until the patient has been free from it for three or four days. Attention also must be paid to the urine: if it gets of a deeper colour, the patient will have an uncomfortable feeling in the epigastrium, and the drops ought to be discontinued until the urine has regained its natural straw-coloured appearance, and then commence again with the drops. The minimum dose I ever found sufficient to effect a cure was ten drops three times a day, and the largest sixty. Sulphuric acid is useful in detecting the presence of gall stones, but probably only of such as have a rough exterior. I suppose the acid narrows the gall bladder and biliary ducts, bringing the stones in closer contact with the sides, and causing thus more or less irritation. But as we cannot beforehand know to what degree this artificial irritation may extend, it appears advisable to abstain altogether from such a diagnostic experiment. Durande's drops are also of the greatest service in obstructions of the liver and the spleen, which may be in an indolent or irritable state; just as many persons have gall stones or partial obstructions of the viscera without their health being impaired, while others suffer from a great number of sympathetic affections, which are all known by their learned names without the primary evil, the cause of them, being discovered. As such I have observed,—chronic headache, mania, amblyopia, sore eyes, double sight, chronic cough, with or without expectoration, vomiting of blood (mostly in affections of the spleen), dropsy, obstinate bleeding from the nose, and other minor inconveniences, as indigestion, eructations, irregular action of the heart, &c., &c. The irritable state is characterised by more or less fever, pains in the sides, cough, with expectoration tinged with blood, severe pains in the epigastrium and in the back, violent colic, obstinate vomiting, and sometimes attacks of jaundice if the liver is the seat of the disease. Many are the causes which occasion a change from the indolent to the irritable state; as, for instance, violent bodily exercise, concussions, assuming a particular position or inclination of the body, vomiting, &c.; the latter particularly has often a tendency to aggravate affections of the abdominal viscera, the effects of which are often perceived only after a day or two. If it is sometimes difficult to distinguish obstructions in the liver from gall-stones, then it must appear a great consolation that we possess a remedy which is in both cases equally effective. The sum of my experience may be thus expressed, that it cures certain obstructions in the liver and spleen, and dissolves gall-stones better than any other remedy.

SPECIAL REMEDIES FOR THE LIVER.

Aqua quassia, the tincture of chelidonium majus, nux vomica, and crocus.

Our author regrets to be unable to give the reader such data from which he might at once make his indications, for the exhibition of one or the other of the above remedies in a given case, though he is as familiar with them as the cobbler with his tools, because he did not observe any characteristic symptoms by which the disease might be recognized, and we must content ourselves to test the efficacy of the above remedies in all diseases of the liver. Before proceeding to the consideration of the different remedies, we may as well here observe, with respect to the peculiar preparations Dr. Rademacher employs, that he found by experience that in many vegetable bodies, as for instance, in tobacco, quassia, nux vomica, &c., the bitter and predominating ingredient does not contain the only healing principle, but that there is also a great virtue in the other more volatile principle, which possesses not that remarkable bitter taste; for this reason he uses a distilled water of quassia, a tincture and a distilled water of both the nux vomica and tobacco.

Aqua Quassia.

R̄ Cort. lign. quass. ℥ ix.
Lign. quass. libr. iv.

Minutim concis. affunde spirit. vini rectif. ℥ xvj. Aq. fontan. libr. vi. post macerat. per duas dies destillent leni igne libr. x. cum uncis octo. Sit limpida.

The peculiar affection of the liver which requires the aq. q., appears not unfrequently under a chronic form, and induces dropsy. This is the kind of dropsy, where all diuretic medicines either prove useless altogether, or if they have any effect at all, it

is but of very short duration; this is one of the dropsies, where after the exhibition of a drastic purgative, a chronic diarrhoea remains, or where even without a purgative having been given, sooner or later a diarrhoea supervenes. This dropsy is a sympathetic affection of the kidney, and can only be cured by removing the primary affection of the liver, which is a morbus quassia. The dose of the aqua quass. is half a tablespoonful with a little water, four times a day.

Tinctura Chelidonii maj.

R̄ Herb: chelid: florent: recentis quantum vis.

Concisa in mortar. lapideo contundatur et ope preli fortiter exprimatur. Succo expresso adde spirit. vini rectific. æqualem quantitatem, et digere mixtum in vase clauso, interdum agitando per aliquot dies, tum filtra.

In the summer of 1827, a fever prevailed, which was chiefly characterised by whitish and colourless excrements as in jaundice, and nevertheless by the absence of all icteric symptoms; from the colour of the excrements, we might conclude that the effusion of bile into the duodenum was impeded, but the total absence of all icteric symptoms proved as clearly a deficiency of bile altogether. The paroxysm of the fever came on irregularly; duration of the disorder, from 3 to 12 weeks. Symptoms very variable, subsultus tendinum, frequently, even in the first five days; tongue, to-day dry, to-morrow moist, and the next day again dry; delirium, but seldom lasting; diarrhoea very frequently, excrements like those of children, of a very light yellow colour, &c. As the urine, in some cases, had a gold colour, which denotes an affection of the biliary ducts, nux vomica, the author's favourite remedy in such cases, was ordered, but without success, on the contrary it aggravated the diarrhoea, or brought it on. Quassia did no good, and calomel harm; at last he found in the chelidonium the sovereign remedy for combating these obstinate and dangerous fevers. If no diarrhoea was present, he gave—

R̄ Tinct: Chelid: ℥ j.
Mucilag. gum. arab. ℥ vi.

for the twenty-four hours. Was diarrhoea present, he ordered—

R̄ Tinct: Chelid: ℥ j.
Olei papav: ℥ iij.
Gumm: Arab: ℥ j.
Aq: font: ℥ vij.

Sign. coch. ampl. horis alternis.

In general, it is advisable to give small doses of the chelid. In the case of an old decrepid man who suffered from dropsy which originated in a primary affection of the liver, the urine did not flow freely until the dose of the chelidonium had been reduced to half a scruple per diem.* In another case a man was suffering from jaundice, and had of his own accord taken a thimble-full of the expressed juice four times a-day. After he began taking it the yellow tinge became still deeper, and he complained of an uncomfortable tension in the epigastrium. He was ordered fifteen drops of the tincture five times a-day, and soon got well.

NUX VOMICA.

This is one of the best remedies in affections of the biliary ducts.† The effusion of bile into the duodenum is either impeded or there is an excess of bile transferred to the intestinal canal. The first appears under the form of jaundice; the second under the form of bilious fever, colic, vomiting, diarrhoea, &c.; because the excessive secretion causes also frequently an alteration in the chemical composition of the bile. For both kinds of affections the nux vomica is an infallible remedy. It is very usual to meet with a great deal of acidity in bilious fevers; it is better to neutralize it than to remove it, after the practice of Stoll and his disciples, by emetics and purgatives. Why exhibit an emetic, which, by the presence of gall-stones or indurations of the liver or spleen, may do much harm and aggravate the disease, if we can neutralize the acidity in the stomach as well and quicker than remove it otherwise. It is an undoubted fact that the tartar emetic and even the red precipitate of antimony, and probably also other antimonial preparations, have the power of lessening the natural action of the biliary ducts; consequently they also restrain an excessive secretion of bile, and may thus cure a bilious fever, not so much because they remove the acrid bile, but because they lessen the excessive action of the biliary ducts. We often observe the excrements becoming whitish and clay-coloured after having given 4 grains of the

* On the Continent all medicines are dispensed by weight only.

† It has also been given with the greatest success in incontinencia urinæ, and dyspepsia, which is not so generally known as it ought to be.

red precipitate of antimony per diem. I also saw once a jaundice brought on by an emetic being given to a lady who had overloaded her stomach with eating. But the reader ought to consider that an alkali not only neutralises the acidity, but has a similar effect on the biliary ducts as the antimony, that is, so far as it acts as an alkali on the stomach, but not so far as it forms with the acid a neutral salt. If you give, therefore, an alkali in so small a dose that it is all converted into a neutral salt by the acid present, you may obtain favourable results, but not the true effect and action as an alkali on the stomach. I give in the twenty-four hours in general,

R Sod. bicarb. ζ ss.

Mucilag. gum. Tragacanth, ζ viii.

Three mixtures of this kind are generally sufficient to remove the unpleasant taste, the fulness in the præcordia, and the fever, so far as it depended upon the irritation caused by acidity and excessive action of the biliary ducts. Of the ammon. carbon. I give two drachms in the same mixture. I have given also magnesia, half an ounce in eight ounces of water, where a greater inclination existed to constipation than diarrhoea. With the magnesia we obtain two ends, as it forms an aperient with the acid, and removes a part of the acid which has not been neutralized. In the first stage of bilious fevers, a diarrhoea depending upon the acid state of the bowels is best removed by the ammonium or the soda. Not unfrequently, besides the excessive action of the biliary ducts, we have in these fevers also an affection of the liver, which shows itself after the acidity has been removed, under the form of a remittent fever approaching near to an intermittent. This morbid state of the liver, and the fever which depends upon it, can neither be removed by purgatives nor alkalies. The tincture of the nux vomica is here the sovereign remedy, given in doses of fifteen drops five times a day. In some cases, while the fever is visibly abating and a general improvement observable, after the nux vomica has been given for a few days, the patient complains of an unpleasant uncomfortable feeling, bitter taste and repletion, immediately after taking the medicine. It is then time to substitute an alkali for the nux vomica, as these symptoms again denote the presence of accumulated bile, but we must be careful not to give more of the alkali than is exactly necessary to neutralise the acid matter and to remove the bitter taste, &c., because if you give more you diminish the action of the biliary organs, which have already been reduced to their normal state, as in this instance the excess of bile results most probably from the cessation of the morbid contractions of the biliary ducts and the gall bladder. This precaution holds good also in jaundice in all its different shades. We find namely, after having again established the free access of bile into the duodenum by all apparent improvement, sometimes an unpleasant feeling in the præcordia and eructations immediately after taking the medicine, which had hitherto acted favourably. If you then give soda, all these symptoms vanish at once; should you continue the soda from over caution longer than is exactly necessary to remove the above symptoms, you perceive at once that the action of the biliary ducts which had just returned to its normal state, is again diminished (the peculiar effect of an alkali as such); the urine gets darker and the excrements are again clay-coloured.

Besides antimony and the alkalies opium also lessens the action of the biliary ducts. Purgatives, as long as they act but moderately on the intestinal canal, increase the action of the biliary ducts but by a greater degree of irritation the effusion of bile into the duodenum is also diminished. The good results we obtain from purgatives in bilious fevers, depends therefore, not only upon the removal of offensive matter, but principally upon the diminished action of the biliary ducts, following the over-irritation of the intestines. The two preparations of the nux vomica have different effects, so that one is often given with benefit, where the other proves quite useless. Their mode of preparation is as follows:—

Tinctura Nucum Vomifarum.

R Nuc. vomice: minutim concis: ζ v.

Spirit: vini: rectif:

Aquæ destill: aa: \mathfrak{f} .j.

Digere in vase clauso, interdum agitans per tres dies—tum ex-prime et filtra.

Aqua Nucum Vomifarum.

R Nuc. vom: minut: concis:

Libras duas cum unciis octo affunde

Spirit: vini: rectificat. ζ iiij.

Aq: commun: libr: quatuor et dimidium: post macerat. per nycthemerum destillent libræ quatuor. Sit limpida.

The first contains most of the bitter principle—strychnine, while the latter contains the less bitter and more volatile principle of the nux vomica. The reader must not however suppose because it has no strong taste, it could be given in large quantities. I advise not to exceed two drachms in the twenty-four hours. In most cases I gave thirty drops five times a day, a little more than a drachm. I have no certain criterion where the one and where the other is indicated. In general by the presence of diarrhoea or great irritability in the epigastrium, the bitter tincture is not so beneficial as the aqua. The dose of the tincture is from five to fifteen drops five times a day, in a slimy vehicle.

CROCUS.

Also the tinct. croc. in small doses has been found useful in many affections of the liver, but especially in dysenteric affections depending upon a primary diseased state of the liver.

(To be continued.)

CORRESPONDENCE.

AN INSTRUCTIVE CASE OF DYSENTERY.

To the Editor of 'The Institute.'

SIR,—The subject of the present case (my own child, a boy 6 years of age), was attacked on the evening of the 3rd January, after a few days of *malaise*, with symptoms of disordered stomach and bowels, for which I gave him a rhubarb draught. An hour or so afterwards he became sick (but without bringing up the draught); in order, however, to relieve the stomach thoroughly, I gave him frequent draughts of warm water, and before he was put to bed, an injection also of warm water, which brought away an immense fecal evacuation; after which he appeared so much relieved, that I asserted he would get up the next morning all right. Finding, however, that he had had ten or twelve mucous motions during the night, I prescribed a chalk mixture, containing tincture of henbane, and a few drops of laudanum, also arrow-root flavoured with brandy, for food.

In the evening as the frequency of the evacuations continued unabated, and as they had become quite characteristic of dysentery, consisting principally of a yellowish or greenish viscid mucus, though sometimes composed of lumps of white mucus, with more or less blood in them, passed frequently, and in small quantities, invariably preceded by pain, and sometimes followed by tenesmus, accompanied also with flatulence, white tongue, tympanitic abdomen, and fever, with evening exacerbations. I consulted my kind and talented friend, Dr. Marshall Hall, who suggested the treatment he found so successful in an epidemic, which occurred some years ago at Nottingham, and with which, I must say, I most cordially agreed, its very simplicity and mildness adding a charm to it, viz.:—"Opiates (T. opii. gtt. iij., spt. ammon. arom. gtt. xv., in sweetened water), every three hours, until either freedom from pain, cessation from purging, or sleep supervened, with strict attention to warmth, and no other food than the following, viz., one part milk, three parts water, thickened with arrow-root." Instead of simple water, rice-water was substituted, and occasionally a top or bottom added.

In addition to the above, he was immersed in a warm bath for ten minutes every night, his room kept warm; and on the third or fourth day, as there had been no fecal evacuation, an injection of barley and rice-water was administered, followed soon after by a dose of the opiate to relieve pain. The enema failed at the time, but fæces appeared on the following day; at first scantily, then more plentifully, and now on the eighth day, they are wholly fecal; since which he has been convalescing rapidly, his only cry being for food.

I should remark that he took but six doses of the opiate, nothing being given when nothing was required, but constant watching,

dissuasion from answering every call of nature, and removal from the "chair" as soon as possible after each evacuation, with an occasional application of lard to the anus, were duly attended to.

I am, Sir, yours respectfully,
CHARLES JONES, M.D.

Manchester Square, January 18, 1851.

To the Editor of 'The Institute.'

SIR,—The few observations which I am about to make are written more for the consideration of parties who may be able to judge and estimate them at their real worth, whatever that may be, than with the wish that they should appear in print. Should you think my scheme visionary, useless, and impracticable, save the profession the labour of reading them; but if, from your acquaintance with the subject, you think them worthy of publication, you can let them appear. My sole wish is to ascertain whether there may not be at the present moment "a tide in the affairs" of the profession, which, "taken at the full, may lead it on to fortune." Some months ago, before I was aware that any Bill had actually been presented to the House of Commons, I wrote to Mr. Wyld, humbly suggesting a few matters which I imagined might be of service if introduced into the new Bill, and by return of post he politely sent me down a copy of it.

The suggestions which I made to Mr. Wyld were several, but the principal was the enforcing, by an express clause in the Bill, an annual subscription from every practising member of the profession. Did I believe that such things as "pures" actually existed, I would consent that they should be exempt; but when I consider how generally the physician practises midwifery, surgery, and medicine, and how often he also is content to forego the dignity of his diploma, and sell drugs like the "poor apothecary," I cannot but consider that the line between him and the general practitioner is so apt to become "fine by degrees and beautifully less," that I would rather at once extract the guinea or two from him by Act of Parliament, than trouble my head for his sake about boundaries. With respect to the "pure" surgeon, the same remarks would apply; and, moreover, the abstaining from the compounding of medicines is so gradually on the increase, and the general practitioner is also so generally in the habit of charging now for the number of his attendances, rather than for the medicines sent out, and the approximation from below is so evident, that the "pures" will always be, year after year, less distinguished for their "purity," and must not expect to escape from contributing their quota towards the advancement of their brethren—aspiring though they be. Opposed to this scheme will be "Legion;" but, Sir, it has always occurred to me that our new College will be very much in want of money when it starts: for my own part I do not reside near enough to London to become an effective member of the Council, and some mischievous person may possibly be inclined to insinuate that distance would not in reality affect my chance of election, but in return I would assure him most candidly that I would decline any honour which implied an association with empty coffers—and from what quarter those of the College are to be filled without some special provision in the Bill, I cannot imagine. I trust that my apprehensions are morbid, and that the Council of our new College will be willing to work for the love of labour; let us pray also that, for the first time in the history of our country, the penniless will command respect. I have most scrupulously considered the Bill; I have reflected on the numbers of good men and true in our ranks, and I have looked to the duties they have to perform. I want for them a Medical School, a Hospital, and the best men of science in Europe for the benefit of students. I want an Assurance Company for them when they go into practice, a Benevolent Society, and a Club-house; in short, I want a place where the young can be trained and where the old can find a home in the metropolis. The lawyers are obliged to pay eight pounds a year each for a certificate to practice, and the money is paid into the Exchequer and goes for the good of the nation—not for their own benefit. Gentlemen, how delighted I should be to see the fatal difficulty which I have been so long in the habit of regarding as the incubus on our progress, for ever removed by a small though compulsory contribution from our

own purses, for the advancement of our own respectability, for the furtherance of medical science, and for our increased usefulness in the world. What an independent set of fellows we should be! With an income of say 30,000*l.* a year, we could have a few members in parliament, and what would be a vast deal better, we could give nice little salaries to any intellectual young men who chose, under the direction of the Council, to devote themselves to scientific pursuits. The medical profession, the most remarkable for their "bonhomie," have no head-quarters. Never while I was a student, do I remember anything that gave me such a feeling of attachment to old institutions, as the cup of coffee at the College when dubbed M.R.C.S.; it seemed like a recognition of my humanity, and how gladly did I incline to the belief that the old fellows did not altogether despise us. I wish that the managers of the old concern had carried out the principle—the coffee principle—and evinced some little proofs of interest in our welfare in after life. As well as I remember, Mr. Editor, the coffee was introduced just before we were called on to pay the fees.—I can only say, that from that moment to this, I have seen no more of the coffee principle! Without remorse, therefore, let us have first-rate examiners, and let us pay them like princes out of our 30,000*l.* Dear Mr. Editor, let the bantling that is about to appear die eternally, rather than let us have a premature, feeble, and incomplete poor thing, fit only for the derision of those who may may not love it.

I have calmly looked around me on my fellows; I have considered them as members of society, as men of science, as men of usefulness; and I have weighed the degree of respect entertained for them and their connections by the public; and I cannot discover why they themselves have so much undervalued themselves, as to attain to the year 1851 without having acquired the independent institutions to which they are so eminently entitled. I have, however, witnessed of late an improved feeling in the profession, Benevolent Institutions, Provident Institutions, &c., &c., but I fear lest want of the needful will oppress all their attempts. Let us, the General Practitioners, be our own patrons, our own trustees, our own friends; let us forget the habit of placing Physicians and "pures" at the head of our provident and charitable institutions. Our proceedings in this respect have been absurd, and have amounted to an admission of inferiority, which, on deliberation, we should be ashamed to acknowledge. Sir, we could manage all these things better with 30,000*l.* a year. That sum would also give a fine stability to a General Practitioners' Insurance Society; and I trust that we shall get it up, as I intend to insure largely next year, or soon thereafter. I recollect being *really* examined at Apothecaries' Hall, and though, Sir, it savoured of drugs, yet it had the necessary smack of business which could not but command respect; if as we go up, the Hall should happen to decline, may its end be tranquil, and its memory honoured. With respect to the Club-house, if it did not answer, it could be relinquished, and the deficit, if any, charged on that £30,000 to which I was alluding, and whose annual efficacy I have been endeavouring to demonstrate. To those who have been successful in practice, the small contribution for which I pray, will be of no consequence, and let him who has been disappointed as an individual, pray with me the more heartily for the general amelioration in which he cannot but participate. There is no science more deserving of cultivation, than the medical; as we become better educated, we shall be less sordid, and more genuine will be the love of our profession for its own sake. We are not, as a body, satisfied with the progress making in science, by our medical corporations, and as General Practitioners, constituting the bulk and majority of the profession, the age calls on us to submit to some sacrifice, even of our pecuniary resources, in order that we may convince the world that we are animated by a better spirit than the spirit of trade, and by a more active zeal than that of the almost defunct bodies, who have only one ability—that of spurning us from their portals.

Without funds—ample and easily raised, as they can be—whence is our prosperity to proceed? Let us all be willing to emulate the conduct of that minority, whose members are subscribing to the National Association, and other similar Societies, voluntarily—let us, after having supinely lingered too long behind them in our exertions, redeem our characters by the endeavour to impose on ourselves, one and all, the burden which we ought now cheerfully, not only to assume, but to render permanent, by the law of the land.

I remain, Sir,
Your obedient servant,
JAMES WEARNE.

Helston, January 20th, 1851.

THE PHILOSOPHICAL GAZETTE.

RESEARCHES ON THE CURARE POISON.

BY MM. PELOUZE AND CL. BERNARD.

CURARE is a violent poison prepared by some of the natives, chiefly cannibals, who inhabit the forests in the vicinity of the High Oronoko, Rio Negro, and Amazon.

Although this poison has been long known, we have as yet no precise knowledge as to the nature of its active principle. Even amongst the savages who sell or exchange it, its preparation remains a secret confined wholly to the priests or conjurers.

According to M. de Humboldt, curare is the aqueous extract of a weed belonging to the family of *strychnaceæ*; according to MM. Boussingault and Roulin, curare contains a substance analogous to the vegetable alkalis *curarine*. The accounts transmitted to us by M. Goudot coincide with those of M. Humboldt so far as regards its being the aqueous extract of a sort of creeper; only he adds, that before the extract, is quite dry, the Indians of Messaya drop into it some of the poison from the vesicles of the most venomous serpents. This last circumstance is of importance, as the physiological effects of curare lead us to regard its mode of action as analogous to that of the animal poisons.

Curare is a solid substance, black, of a resinous appearance, and soluble in water.

We will hereafter return to the chemical characters of this substance; first showing its physiological properties, as proved on living animals.

Curare resembles the venom of the viper in this well-known particular—it can be introduced with impunity into the digestive canal of man or animals, whilst, if introduced by a puncture under the skin, in any part of the body, its absorption is infallibly and rapidly mortal. We have assured ourselves of the exactness of this statement by many experiments.

The poisonous action of curare is instantaneous when injected directly into the blood vessels. A weak aqueous solution of this poison put into the jugular vein of a dog or rabbit has always caused sudden death, without the animal uttering any cry, or manifesting any convulsive agitation. When curare in solution or in solid pieces is introduced under the skin, its fatal action is more slowly manifested, and the time varies a little according to the quality of the poison, the quantity introduced, the size of the animal and its kind. *Ceteris paribus*, birds die first, then the mammifera, and finally reptiles; but death is certain, with similar and very singular symptoms. The animal does not immediately give any apparent sign of anything being the matter. If a bird, for example, it flies as usual, but after some seconds, when the curare is very active, the animal falls dead, without uttering any cry and without any appearance of suffering. Neither do dogs or rabbits exhibit anything unusual immediately after the poison is deposited under the skin, but after a few moments, they lie down as if fatigued, and appear to fall asleep, then respiration ceases, sensibility and life disappear without the animal having uttered a cry or manifested any pain. There are sometimes perceptible slight muscular contractions of the face and body.

On opening the body of the poisoned animal immediately after death, we have always remarked phenomena which indicate a complete annihilation of all the properties of the nervous system. Generally, when animals have died suddenly, the nerves preserve for some time the power of reacting under the influence of mechanical or chemical excitants. If we excite a nerve of motion, we see convulsions of the muscles to which it leads; if we pinch the skin, we give rise to the peculiar movements designated *reflex movements*. After death by curare, none of these properties continue. When the animal is but just dead and is still warm, the nerves are as inert as those of an animal which has been long dead.

Finally, after poisoning in this manner, the blood is always black, and often so much altered as to coagulate with difficulty, and does not become red on contact with the air.

If we compare this action of curare with that of the venom of the viper, we shall find great analogy in its effects, except in intensity, with the phenomena observed by Fontana in the blood and nervous system of animals killed by the venom of the viper. We have also remarked that curare, like the serpent's venom, may be introduced with impunity into the intestinal canal. This last peculiarity is the object of our present attention.

When we observe the perfect innocuousness of curare when introduced into the stomach, we might imagine that this poison must be modified, digested, in a word, by the gastric juices, in

such a manner that its deleterious properties are destroyed. It was with the view of verifying this supposition that we placed in the sand-bath, between 100° and 104° F., for 24 or 48 hours, some curare in the gastric juice of a dog. After the lapse of this time, we pricked animals with this gastric juice containing curare in solution; these animals died in the usual manner: thus we proved that the contact of curare with the gastric juice for 24 or 48 hours does not alter its deleterious properties. This experiment has been often repeated, and varied in all ways, it has been produced sometimes out of the animal, and sometimes on the living animal itself. In the case of a dog in which we had caused a fistula in the stomach, we made him swallow some pieces of curare with or without his food, and when, after some time, we removed from him some of the gastric juice, we found that it had all the destructive properties of a solution of curare. We had thus before us the singular spectacle of a dog who carried in his stomach, without suffering any inconvenience from it, a liquid which causes instantaneous death to all the animals inoculated with it. Not only is the dog whose stomach contains curare free from danger to its existence, but his digestion remains perfectly unimpaired. We have several times distinctly proved that the gastric juice to which curare has been added loses none of its digestive properties.

It is, then, proved that the special action of the gastric juice cannot be the reason of the innocuousness of the curare when introduced into the stomach. The other intestinal liquids, the saliva, the bile, the pancreatic juice, furnish a similar result, that is to say, that none of these fluids destroy, by contact, the poisonous action of curare.

The explanation of the facts which we have mentioned will be easily given by demonstrating that there exists no power in the surface of the gastro-intestinal mucous membrane of absorbing the venomous substance.

We have stated that by a peculiar privilege the mucous membrane of the stomach and intestines does not permit of the passage through it of the poisonous principle of curare, although it is soluble. This fact is proved by the following experiment:—If we take the gastric mucous membrane fresh from a newly-killed animal (dog or rabbit) and adapt it to an endosmometer, in such a manner that the mucous surface is turned outwards; then plunge the endosmometer containing sugar and water into an aqueous solution of curare, we shall find, at the end of two or three hours, that the endosmose will be effected; the level will have risen in the endosmometric tube, nevertheless the liquid contained in it will present no trace of poison, as is proved if we inoculate animals with it.

If we let the experiment go farther, the endosmose of the poison might take place, but we should find at the same time that the membrane is modified, and that the mucus as well as the epithelium which cover its surface are altered, and have consequently permitted the inhibition or endosmose of the poisonous principle of the curare. This is so true, that if, instead of employing in this experiment sound and fresh membrane, we take one which is already decomposing, the endosmose of the poisonous liquid immediately takes place. We can also prove this same property of the intestinal mucous membrane in a living animal, and we arrive at this conclusion, that among the apparently perfectly soluble substances, some may be deposited in the surface of the gastro-intestinal mucous membrane, and remain there unabsorbed, and consequently without manifesting their action upon the organism. Now the active principle of the curare is precisely one of these.

As it would be useful to discover whether any other mucous membrane than those of the digestive organs possesses this same property with regard to curare, we have successively experimented upon the mucous membranes of the bladder, nose and eyes, and always found the same property of resistance to the absorption of the toxic principle of the curare. An injection of this poison into the bladder of a dog has been retained by the animal for six or eight hours, without producing any ill effects; but the urine which it passed after that time had all the poisonous properties of curare.

One mucous membrane of the body made, in this respect, a very remarkable exception; this is the mucous membrane of the lungs: it behaves, with respect to the absorption of curare, exactly like the sub-cutaneous cellular tissue, that is to say, that where some drops of the toxic solution are introduced, with all the necessary precautions, into the air passages, death follows with the same rapidity as if we pricked the animal under the skin.

We thus see that this mucous membrane, being designed solely for the passage of air to accomplish the phenomena of respiration, possesses a peculiar texture, and is without the mucus which lubricates the other surfaces communicating with the exterior.

This circumstance accords perfectly with the observations already made by M. Magendie, upon the structure and properties of the bronchial mucous membrane.

We shall not further extend our remarks upon the different remarkable absorbing powers presented to us by the various mucous membranes of the body. We shall hereafter return to this subject, and show that the non-absorption of the active principle of curare is not an isolated fact; and that in the intestines, for example, many principles secreted in the digestive liquids, however soluble, are not absorbed, and are forced, consequently, to act as though confined in close vessels.

For the present, we arrive at these conclusions:—

1st. That curare acts upon animals in the same manner as venoms.

2nd. That its harmlessness, when introduced into the intestinal canal, cannot be explained by the alteration or digestion undergone by the poisonous principle, but is a consequence of a peculiar property in the gastro-intestinal mucous membrane, which will not absorb it.—*Repertoire de Pharmacie, Nov., 1850.*

BELLADONNA IN SCARLET FEVER.

Mr. T. J. Green, of Peckham, corroborates the communication of Dr. Gardner, as to the value of belladonna in scarlet fever. He observes, "The preparation I have used for ten years is the Apothecaries' Hall powder; the colour, aroma, and virtues of this, will, in a dark green bottle, keep for years. The dose I have always given to persons above puberty is one-sixth of a grain in mint water, every four hours. For children I rub 1 grain with 5 grains of powder of liquorice root, and of this give one-sixth or one-twelfth of a grain in water, every four hours. For infants it should be used in extremely minute doses, as it sometimes, in my opinion, brings on spasm of the larynx, and kills the child. A gargle of the sulphate of copper, 1 grain to 1 ounce of warm water, or camphor mixture, used every hour, is very good."

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, February	1, at 8 P.M.
CHEMICAL,	Monday, do.	3, at 8 P.M.
EPIDEMIOLOGICAL,	do. do.	3, at 8½ P.M.
LINNÆAN,	Tuesday, do.	4, at 8 P.M.
PATHOLOGICAL,	do. do.	4, at 8 P.M.
GEOLOGICAL,	Wednesday, do.	5, at 8½ P.M.
ROYAL	Thursday, do.	6, at 8½ P.M.
KING'S COLLEGE (Medical),	do. do.	6, at 7½ P.M.
[On Placenta Prævia. By Samuel Griffith, Esq.]		
BOTANICAL,	Friday, do.	7, at 8 P.M.
ROYAL INSTITUTION,	do. do.	7, at 8½ P.M.
MEDICAL,	Saturday, do.	8, at 8 P.M.

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THE INSTITUTE.

LONDON, SATURDAY, FEBRUARY 1, 1851.

In pursuing our remarks upon Homœopathy, we may take the letter of Mr. GREEN, selected for insertion in our last number, as our text, not merely because it strikingly justifies our former strictures on that system, but because it contains no personalities, or abusive language, the weapons of our other correspondents, who would controvert our arguments.

Once more we entreat both our friends, and foes to observe, that an entire absence of personal attack is an essential qualification for communications to be printed in the pages of 'THE INSTITUTE.'

MR. GREEN, it will be observed, altogether repudiates infinitesimal doses, and homœopathic pharmacy, and in doing so, escapes from the charge of gross ignorance of the nature of numbers betrayed by most homœopathists. It is idle to talk of the etymological meaning of the designation they have chosen; words acquire an appropriate sense so soon as they are transferred from one language to another, and we appeal to our readers to say whether, in the public mind, and in all the writings of the sect, the little globule, and the infinitesimal dose, be not inseparably associated with whatever other doctrines homœopathists may profess. It is only this which renders fraudulent the administration of large doses by these people.

Indeed, if our own observation of what is passing around us be not wholly at fault, we should conclude that many of our professional brethren become dilettante homœopathists from an unhappy scepticism on the subject of remedial agents, engendered in their minds, by an erroneous view of the true objects of research in medicine. Such sceptics, having a sound and extensive knowledge of physical science, looking in vain for the same universal laws, the same certainty of effects flowing from ascertained causes, in physiology and pathology, as they are accustomed to see in dealing with inorganic matter in the laboratory, are disposed to take refuge in the suspicion that remedies are all useless; that if diseases are ever cured, it is by the unaided efforts of nature, and they would hence sanction the little globule, and the millionth-of-a-grain dose, merely to amuse the imagination of their patients, and permit nature to do her work unmolested. A candid scepticism always merits a calm and deliberate argument, and we may in a future number address ourselves to this topic.

But our correspondent, instead of an ingenuous scepticism, manifests a full amount of what we must call a blind credulity; justifying our assertion of the strange misconceptions on which homœopathy is founded. Where could he learn such axioms of physics, as "*the quantity of a body and the degree of division of a body are distinct things*" applied to solutions? Where such physiology as "*the sulphur in the bile is what is excreted after having done its work*?"

It would be useless to dwell upon minor, and special errors, we therefore come to the acknowledged fundamental principle of homœopathy, "*Similia similibus curantur.*" MR. GREEN asks, "*What truth can be more simple than this, that a drug which can produce a disorder in a healthy body is the proper remedy for a similar disorder in an unhealthy one?*"

Instead of a simple truth, a more complicated, or a grosser absurdity was never enunciated.

The ambiguity of the word *similar*, in this use of it, is so obvious that we cannot avoid forming a very low estimate of the intellectual powers of the man whom it can confound. To call an honest homœopathist *weak*, is, we conceive, the exercise of an enlarged charity; add to his assumption of such a maxim the pretension respecting millionths and billionths of grains, and it implies an ignorance so dense as to be more dangerous to society than knavery.

There is not the shadow of a foundation for the supposition that any drug in existence could produce small-pox, measles, scarlet fever, plague, cholera, diabetes, whooping cough, or

any other of the various diseases we are called upon to treat; nor is there any possibility whatever, of employing the agents which cause these diseases, as instruments of cure. It is, indeed, a well established law of physiology, that the system once having passed through small-pox, is not again susceptible to its influence, except in a very slight degree. Hence the prophylactic power of vaccination. Vaccine lymph is the same as variolous lymph. It will not cure small-pox. The exact analogy of the character and influence of the same matter in different states, with the surface yeast, and bottom yeast of ordinary fermentation, duly understood, contradicts every assumption of homœopathy.

In the writings of toxicologists we have abundant examples of the physiological action of agents—poisons in large doses—remedies when judiciously apportioned and applied—but none of these afford the least pretext for the hypothesis, that they give rise to diseases identical with those originating from other causes; so essentially peculiar and specific are the effects of every energetic agent, that no uncommon sagacity is required to pronounce at once the nature of the poison taken, by a simple glance at the phenomena produced. If an erythematous blush on the skin be a symptom, no one but a blockhead would confound it with measles, or scarlatina.

Perhaps, however, the homœopathist will shift his ground, and say, that by the word *similar* he intends not *identity* but *resemblance*. This renders his principle even more absurd. What are the things between which the resemblance must lie? MR. GREEN defines homœopathy—"The administration of drugs for the removal of similar symptoms," as if similar symptoms, *i. e.* symptoms bearing a very close resemblance, did not occur in the most opposite and contrary diseases. Take the case of headache. According to this system, if a drug produces headache, it will cure headache. Who that has ever directed his attention to therapeutics for a day can tolerate such nonsense. Indeed, this kind of reasoning and this use of *similia similibus*, has only one parallel—"Talk of likenesses, you should see my niggers, Cæsar and Pompey, they are so wonderfully like, 'specially Pompey!"

INFLUENCE OF THE SEASONS AND WEATHER ON SICKNESS AND MORTALITY.

THE medical topography of England, through statistical and meteorological inquiries, has hitherto been fragmentary. The importance of such investigations no one will dispute; and we have been anxious since the commencement of our Journal, to institute some such inquiries, upon a well considered plan. The advance in the science of meteorology, within the last few years, has been considerable, and in many localities the results from good instruments are faithfully recorded. These results are published in the form of monthly values, but the period of a month is far too long, in respect to climate, medically considered, to institute comparisons of that precise and detailed kind which are requisite for the purpose of our profession. Our space enables us to publish weekly results only, though at times there is little doubt that a daily discussion of facts would be most desirable; but, at the same time, we shall endeavour that no remarkable fact relative to daily changes shall be omitted. James Glaisher, Esq., F.R.S., and of the Royal Observatory, Greenwich, has published, in the Philosophical Transactions, a series of corrections, which have recently been republished

by the British Meteorological Society, by which the comparison of observations at different places will be greatly facilitated; and he has promised his valuable aid in the discussion of the observations for our Journal. In selecting the places,* we have been decided by the advice of Mr. GLAISHER.

It appears of consequence to bestow a few words on the arrangements we have adopted with a view to ensure accuracy and regularity in our reports.

To every station blank forms are forwarded, to be filled up with the observations required. At the end of each week, these are sent to Mr. Glaisher for his superintendence in their examination, calculation of results, and preparation for the press.

These tables furnish the means of deducing the relations subsisting between the seasons and the weather, in any particular period, with the amount of sickness and mortality, if such should have been concurrently noted, as shown by the effects of the weather upon those diseases under the influence of atmospheric causes, and thus ascertaining upon what elements either sickness or mortality depends, and whether the amounts vary directly or inversely with pressure, temperature, sudden changes of temperature, daily ranges of temperature, or humidity in the atmosphere.

The periods in which the greatest number of cases of particular diseases occur may be arranged with the different elements in the tables, with respect to those cases.

The relative sickness and mortality in different periods with respect to the meteorology of those periods may be determined.

1st. By the comparison of results year by year, may be determined whether the same order of sickness and mortality obtains every year.

2nd. By the determination of the normal states of the atmosphere in the different seasons, the abnormal states during the prevalence of epidemics may be found.

It scarcely seems necessary to point out further the scientific importance of such reports, and the investigations to which they are applicable.

We are fully aware of the difficulty of making truthful observations respecting the influences of atmospheric phenomena on the production and modification of diseases, yet as such inquiries can be carried out fully by medical gentlemen only, who can include those of soil, geology, habits and occupations of the people, we do hope that many will be induced to pursue such inquiries.

In conclusion, we trust by these means to improve our knowledge of the medical topography of England, by giving the means of investigations in the modifications of endemic and epidemic diseases in different localities at different times.

MEDICAL INTELLIGENCE.

MEDICAL SOCIETY OF LONDON.

January 11th, 1851.

Dr. J. R. BENNETT, President, in the Chair.

(Continued from page 66, vol. ii.)

THE INHALATION OF VARIOUS MEDICINAL SUBSTANCES.

Dr. SNOW read a paper on the Inhalation of various Medicinal Substances. He said, that previously to the discovery of etherisation, medicines had rarely been inhaled, except with a view to their local action; but that there was no more reason to limit inhalation to pulmonary diseases, than to restrict the exhibition of medicines by deglutition to affections of the stomach and bowels. He admitted, however, that the proper administration of medicines by inhalation was attended with much greater diffi-

* Vide the Meteorological Tables, page 98.

culties than their exhibition in the usual way. The chief object of his communication was to point out the manner in which certain medicines could be inhaled. According to their different physical properties they might be inhaled either with or without the aid of heat; when heat was employed, they might be inhaled either in the dry way, or with the vapour of water. The inhalers employed were described in a former number of this journal.* The fumes expelled by heat from the extracts of opium, stramonium, and aconite, were inhaled dry. Ammoniacum and other gum resins could be inhaled either in the same way, or with the vapour of water. Turpentine, creosote, camphor, iodine, and benzoic acid, had been conveniently inhaled along with watery vapour, by placing the dose of medicine to be used in about half an ounce of water, which was heated by the flame of a spirit-lamp. Several of these medicines had also been inhaled at the ordinary temperature of the air, without vapour of water, as also had ammonia, hydrocyanic acid, and chlorine. For drawing nitrate of silver into the larynx in the form of powder, the bowl of a pipe, with a glass tube fitted into it, was used. A grain of nitrate of silver, finely powdered with five grains of loaf sugar, were inhaled, by a strong inspiration, once a day. The sugar was recommended by a French author for diluting the agent, and had an advantage over lycopodium powder and similar substances, which, not being soluble in the mucus of the air passages, caused irritation. At the Hospital for Consumption at Brompton, the physicians to which institution had invited Dr. Snow to assist in contriving and superintending the inhalation of medicines, opium had been inhaled by a considerable number of phthisical patients generally with marked benefit. Relief had also been obtained from several other medicines; but the inhalation of iodine and chlorine had apparently not been attended with any advantage. It might not be uninteresting to mention that, whilst four patients were inhaling chlorine twice a day, in the summer of 1849, two of them were attacked with cholera, they being the only patients in the hospital that were attacked with it at the time. As chlorine can be smelt exhaling in the breath for hours after the patient has inhaled it, he thought that this occurrence was opposed to the hypothesis, that the diffusion of chlorine in the air had the power of limiting or preventing the spread of cholera. It was not his intention to treat the inhalation of chloroform on the present occasion; but having been speaking of pulmonary affections, he might state that he had never seen chloroform fail to relieve an attack of spasmodic asthma in any case in which it had been inhaled.

Mr. Whyte inquired if pyroligneous acid had been used by Dr. Snow in vapour, as recommended by Dr. Hastings. In some of the cases alluded to by that author, other remedies than the substance inhaled had been employed, and thus the results were invalidated.

Dr. Snow had not experimented with pyroligneous acid.

Mr. Whyte asked Dr. Snow if he had succeeded in effecting the inhalation of mercury, so as to affect the system. He put the question, because he had himself succeeded in effecting this object in some experiments which he had lately performed before several members of the profession, and that without disordering either the stomach or bowels.

Mr. Streeter observed that the subject before the society was one of considerable interest. There were two points of view in which it might be examined; the one was, how far inhalation of medicines was preferable to other modes of exhibiting them, and the other referred to the nature of the instruments by which that object was to be effected. At present there is not sufficient evidence on the first point, the inconveniences attending it preventing its general applicability. Very strong evidence is required to show that the system of inhalation, as regarded the administration of drugs, is desirable. While the process is going on, there exists very considerable interruption to respiration, the quantity of air drawn into the chest being greatly lessened, and the patient compelled to breathe vapour instead. This is the great fault of many instruments for the inhalation of chloroform, the patients being often half suffocated for want of oxygen, instead of being injured by the toxic effect of the agent. The action of medicines taken into the stomach has not yet been fully examined. When so introduced, in a state of dilution below the specific gravity of the blood, they are at once absorbed, and conveyed into the circulation; but if not so much reduced, they undergo a great change by the process of digestion. The process of inhalation in a rough way had often been employed by the profession; the vapour of hot water and of tar, the latter recommended by Crichton, have been used previously, as also of other

remedies. The principal value of Dr. Snow's process seemed to him to consist in the inhalation of certain drugs in stated measured quantities.

Mr. Barlow commended inhalation of anesthetics, in certain diseases; for instance, in nervous disorders. He stated that in tetanus the inhalation of chloroform, although it might not cure, would, nevertheless, greatly alleviate the sufferings of the patient; and he instanced the case of a child in the Westminster Hospital, labouring under tetanus consequent on a severe burn, who was threatened with asphyxia whenever he attempted to swallow, and to whom inhalation of chloroform always afforded great relief. There was no question that the inhalation of ammonia in certain cases of bronchitis was serviceable. He would be glad to know from Dr. Snow, if he had had any experience of chloroform in tetanus, and what were the results?

Dr. Routh said he had used Mr. White's inhaling apparatus in six cases. The apparatus was fully described (*Lancet*, January 4th). In one, a case of asthma, where the man was reduced to a desperate state of weakness, after preliminary treatment for a week, inhalation of an ethereal solution of stramonium had been tried. The paroxysms, which at first used to recur every half-hour or an hour, had yielded. The man slept well, and was now able to walk. One inhalation of a mixture of Tinct. Ferri Sesquichl. gr. xv., Tinct. Cantharidis, m. x., had stopped for twenty-four hours an involuntary escape, or dribbling of the urine, which had existed for weeks. He instanced also two cases of bad peripneumonia notha, in which the inhalation of an ethereal solution of stramonium had removed all urgent symptoms, and enabled the patients to resume their work. He had also used it in two cases of secondary syphilis. In one which had resisted the action of a week's exhibition of Unguent. Hydrarg. fort. gr. ij., four or five times a day, a solitary inhalation of seven inspirations of a medicated cylinder containing 10 per cent. of cinabar, had produced, in five hours, shivers; in eight, the coppery taste in the mouth; in twelve, salivation. The case, it was true, was open to the fallacy that the salivation might have been due to the mercury first given; but the action of the mineral had been maintained ever since by inhalation only. In another case, a gentleman with secondary syphilis of twenty years' duration, and who could not take mercury by the mouth without diarrhoea and great nervousness being induced, the eruption, consisting of large maculae, with more or less psoriasis, began to disappear rapidly under very slight and daily inhalation. It was much diminished after a fortnight, and he (Dr. R.) expected a cure in a month. None of the unpleasant effects of the mercurial influence before complained of were now observed. Dr. R. did not mean to say it was right to trust only to inhalation in the cure of disease, but that it was a very useful adjunct. He spoke in high terms of Mr. White's apparatus, as enabling the practitioner completely to regulate the quantity of mercury given. A quantity not greater than 1-500th of a grain might be administered if required.

Dr. Theophilus Thompson considered that the mode of inhalation employed by Dr. Snow was a great improvement on all the plans he had previously seen. He had found the inhalation of chlorine very serviceable in certain cases of bronchitic affections, with dilatation of the tubes and profuse secretion, restoring the patient to comparative health and comfort. Chloroform also had given great relief in asthma, but its inhalation was scarcely to be recommended indiscriminately in that disease, in cases at all events where the parietes of the heart are dilated and thinned. He should be inclined, therefore, to seek another remedy. Stramonium was very useful, but uncertain. A piece of paper, soaked in a saturated solution of nitrate of potash, which was first recommended by Mr. Harrison, a surgeon in the neighbourhood of Manchester, had been found of service in some cases, but failed in others. It was dried, and set fire to, being held under the nose while burning. This, however, leads to the hope that we may yet find something that will be more serviceable. With respect to inhalation in consumption, the results as yet were not very encouraging. Hydrocyanic acid gave but little relief, opium rather more, but none of the agents afforded so much benefit as to repay the trouble of using the apparatus. Such a result was to be expected, as the cause of the cough in consumption was permanent, and it could not be supposed that a transient application could remove it. He (Dr. T.) was not sanguine enough to expect a cure in phthisis pulmonalis from inhalation. The cause of the disease lay too deep. We must aim at this by measures which will improve the tone of the constitution and the condition of the blood.

Dr. Winslow remarked that the paper was of great practical importance, but the data were not sufficiently numerous, to enable them to come to a sound and satisfactory conclusion as to the principle in question. There was a class of cases, not alluded

* See *Institute*, Dec. 14, 1850.

to by the author, to which inhalation was fairly applicable. He meant those cases in which remedies could not be administered by the stomach, because it would not retain them, from idiosyncrasy, or from some other cause. The inhalation of chloroform had been tested in certain nervous and convulsive diseases, in puerperal convulsions, hydrophobia, &c. He had himself used it in a modified manner with great advantage in some anomalous nervous cases. He sprinkled half a teaspoonful on a handkerchief, and laid it on the patient's pillow. It always produced a sedative action, and there was a lady now under his care, who could never sleep without it.

Dr. Snow had not alluded to mercury in his paper, as he had not had any case under his notice in which its inhalation would have been serviceable; but he did not doubt the power of his apparatus to effect its inhalation. Sir B. C. Brodie thought the black oxide of the mineral the best preparation for that purpose. In Dr. Routh's case, he (Dr. S.) thought the salivation was due to the mercury exhibited previous to the inhalation, because that effect did not occur until some hours after the apparatus had been used, whereas it ought to have taken place at once. Stramonium and ether could not be inhaled together, because the latter was by far the more volatile. He had exhibited chloroform in a case of tetanus after a burn, in a patient at St. George's, under Mr. Keate's care. The child was much relieved, but ultimately sunk from debility. He believed chloroform was able to prevent the patient being cut off by spasm. It is of decided use in convulsive diseases, such as puerperal convulsions, spasmodic asthma, &c. Vomiting, especially when hysterical, had been arrested by its use.

January, 18, 1851.

PLEURODYNIA—PLEURIST—EFFUSION ?

Dr. Ogier Ward wished to obtain the opinion of the fellows respecting the case of a gentleman, 40 years of age, then under his care. This gentleman, of the nervous temperament, was seen by Dr. Ogier Ward on account of pain in the left side, with dyspepsia. The chest was examined, and the pain pronounced to be pleurodynia. Some medicine was ordered, and mustard poultices with a stimulating liniment to the side. He appeared to be getting better; but, the bowels being confined, pills with mercury, colocynth, and hyoscyamus, were ordered to be taken at bed-time. He slept but little, and the next day was extremely prostrated, with pain in all his limbs. When seen by Dr. Ward, he complained of pain in the bowels, with great flatulence, pain in the left nipple and in the back, with tenderness of the muscles. Dr. Ward examined the chest, and found complete dullness over the lower part of the left side; no sounds whatever being heard on applying the ear. On the right side respiration was clear, but not sufficiently so to be called puerile; respiration was equal in the upper parts of both sides. The dullness persisted, and occupied the same site, notwithstanding a change of position. The ribs on the affected side did not expand equally with those on the right, and pain was complained of on pressure in the intercostal spaces. There was not any dyspnoea nor cough, nor any enlargement of the left side, but rather a shrinking or collapse. The tongue was clean, the pulse feeble and not quicker than natural. The history of the case did not disclose any antecedent disease. Dr. Ward considered this to be a case of considerable interest, as to the cause of the dullness. The question was, whether sudden effusion had occurred, or whether there was congestion of the lungs sufficient to compress the bronchia, and prevent respiration.

Dr. J. R. Bennett observed it was difficult to form an opinion on such a case, unless the physical signs had been personally investigated; he thought the case was an instance of pleurisy.

Dr. Routh thought the disease was a solid effusion on the walls of the chest. If the effusion were liquid, it would be tied down by adhesions, at the edges of which there would be bronchial respiration and egophony. His opinion was confirmed by a case which he saw some time ago in University College Hospital, under the care of Dr. Taylor. A patient was admitted with pleurodynia, in whom dullness supervened and continued increasing, with diminishing respiration, there not being any other signs of liquid pleuritic effusion. Dr. Taylor diagnosed solid effusion on the pleuræ, and the *post mortem* examination of another case some months afterwards, in which similar symptoms had occurred, proved him to be correct. In the first case, all remedies had failed to remove the dullness.

Dr. Ogier Ward asked if there were condensation of the lower part of the lung, in the fatal case mentioned by Dr. Routh.

Dr. Routh replied in the negative; the great thickness of the pleura was apparently the sole cause for the interception of sound.

Dr. J. R. Bennett said, there was no doubt that bronchial respiration and dullness often remain for some years after complete recovery from acute pleurisy. He had met with several instances of this; the dullness was very great, and the respiration distant, the distance being the result, he supposed, of the separation between the surfaces of the two pleura.

ENCEPHALOID DISEASE OF THE PERITONEUM.

Dr. Snow Beck exhibited the uterus, ovaries, and portion of the large intestine, taken from the body of a woman who died from cancer of the peritoneum. When she came under observation, she was emaciated to an extreme degree, yet, with no appearance of malignant disease in her countenance, only that of emaciation from starvation. She complained of no pain, yet the abdomen was distended with fluid, and covered with dilated superficial veins. She had also obstinate constipation of bowels, and constant vomiting of stercoraceous matter. Some of the symptoms detailed led to an examination of the uterus, when the orifice was found patent, admitting the end of the finger, deeply fissured, and the lips enlarged. On passing the finger behind the organ, it came into contact with a round smooth body, which gave the impression of great size and weight, and was immoveable in the pelvis. It also pressed against the rectum, and was considered to be a fibrous tumour, and the possible cause of the constipation. Enemata, with a long flexible tube passed a considerable distance up the rectum, were employed. When using the tube it came to a part of the gut which was evidently constricted, and appeared to pass round a substance of some size. Some fecal matter was evacuated by these means, and the patient expressed herself as being relieved. The vomiting also ceased for a short time; but it soon returned, and it became evident that this was not the only seat of the obstruction. She gradually sank, from inability to take and digest her food. At the examination of the body after death, the abdomen was filled with dark brown coloured serum; the small intestines much distended with light yellow feculent matter, mixed with some harder lumps. Both the parietal and visceral peritoneum were much thickened, and of a grey, somewhat translucent appearance, and dotted over with small masses of cancer, varying from the size of a pin's head to that of two peas. The edges of the intestines were deeply injected, of a dull red colour. The omentum was much wrinkled up, and infiltrated with similar matter. The uterus was of the natural size, but united into one firm mass, with the ovaries and middle portion of the rectum. No malignant deposit was found in any of the viscera, except one nodule in the pylorus, and it was doubtful whether it was not in the subserous cellular tissue. The intestines were much twisted from their natural positions in the abdomen, and the seat of the constriction was found to be near the termination of the small intestines; it was produced by the contraction of the mesentery drawing the intestine into an angular fold, and so obstructing the passage of the feces. On more careful inspection, the peritoneum was found little altered; but the subserous cellular tissue was much thickened by the deposit of fibro-plastic material. The cancer was deposited in isolated small nodules, chiefly above the course of the blood-vessels, and these probably, by exciting inflammation, led to the deposit of fibro-plastic matter, by the subsequent contraction of which the displacement of the intestines, and the ultimate obstruction to the feces, were accomplished. The cancer was deposited immediately beneath the peritoneum, in masses of a round or oval form, of a grey, somewhat semitranslucent appearance at the circumference, with a light yellow opaque centre, extremely like tubercular material. Examined under the microscope, the grey portions were composed chiefly of a transparent stroma, containing many granules and numerous cells. The cells were round or oval, of various sizes, yet all small, with defined outline, thickened capsule, and granular contents. Some of these contained two, three, or five nuclei, whilst others appeared not to have any. By the action of acetic acid, the capsule and contents became more transparent, and the nuclei more distinct. The light yellow central portions consisted of nuclei identical in appearance with those already described, yet with a decided yellow tinge of colour. The stroma was less in quantity, the cells more crowded together, and the granules in greater abundance. The left ovary was dilated into a thick sac, the size of a hen's egg, containing clear light-brown fluid. The interior of the sac was lined by a loose red coagulum. The right ovary formed a mass of solid cancerous disease, in size a little smaller than the left. Covering the ovaries and body of the uterus, and uniting them to the rectum and cellular tissue in the pelvis, was a thick layer of grey thickened subserous cellular tissue, closely dotted over with small nodules of cancer. The contraction of the material had

bent the uterus upon itself, anteriorly presenting the curved body of the organ to the finger introduced into the vagina. This smooth rounded surface, coupled with the firm agglutination to the surrounding structures, gave to the finger the feeling of an enlarged and weighty organ pressing upon the rectum. The substance of the uterus was pale and rather firmer than usual, presenting numerous yellow points on the cut surfaces, which were principally seated near the fundus. They were found to be diseased blood-vessels surrounded by a yellow coloured cellular tissue, infiltrated in which were some cells identical in appearance to those already described as formed in the masses beneath the peritoneum. The neck of the uterus was in no way altered from the natural appearance—the orifice large, open, fissured, and the lips swollen. Surrounding the orifice were several small round transparent bodies, filled with transparent white-of-egg mucus, and at one side of the orifice a rounded sessile mass projected from the lips. This on being opened was seen to be a cyst with transparent white-of-egg mucus, which contained, at one part, many compound granular corpuscles and fat globules. There was no ulceration or excoriation present. Apart from the interest which this case presents, as one of malignant disease infiltrated beneath the peritoneum, thus giving rise to inflammation and the exudation of fibroplastic material, by the contraction of which latter product great displacement of the viscera was caused, with permanent obstruction of the intestines, it offers an excellent demonstration of some of the errors which have been imported from abroad into this department of pathology. It is said that the body of the uterus is not liable to inflammation, because there is no cellular tissue in the part. Here is a demonstration, not only that this tissue exists, but that it was infiltrated with cancer-cells. Again, this patent state of the orifice is said to be “pathognomonic” of ulceration, yet no ulceration was here present, nor was there any excoriation. The fissures at the orifice have also been said to depend on lacerations during parturition, whilst here they are shown to depend on a swollen state of the structures of the neck, depending upon an enlargement of the glands by retention of their contents; the structures being constricted within a circumscribed compass, and hence become folded and form fissures between the folds. All these statements have been made on very insufficient data, and are not to be depended upon.

In reply to some questions put by Dr. Murphy, Dr. Snow Beck said, that the patient's countenance did not present any evidence of malignant disease—merely that of emaciation, or rather, of absolute starvation. He did not know anything respecting the condition of the uterine functions, nor could any reliance be placed on what the poor woman said, as she was as much debilitated in mind as in body. At all events, there was not any menorrhagia, nor did she complain of any pain. Her age, he thought, was about 40.

THE ASSIMILATIVE FORCE IN RELATION TO HYPERTROPHY AND ATROPHY.

Dr. Henry read a paper on the assimilative force in relation to hypertrophy and atrophy. The object which the author had in view was to draw attention to the assimilative force as a primary element of disease. The subject was treated of under the following heads:—

1. The assimilative power as a physiological element.
 2. Excess of assimilative power the essential element in hypertrophy.
 3. Defect of the power an element in atrophy.
 4. Therapeutic indications.
1. The assimilative power was defined to be, that force by which the tissues of the body appropriate the plastic material presented to them. The distinctions between growth and reparative nutrition were pointed out, and the varying degrees in which the assimilative force exists in different tissues were referred to.
2. Hypertrophy was treated of under the heads of congenital or intra-uterine hypertrophy—hypertrophy from increased functional exercise, and from increased and long-continued afflux of blood to a part. The cases of congenital hypertrophy, in which a limb or part of a limb far exceeded in proportion the other parts of the body, were not easy to be explained. If the primary phenomenon was an increased flow of blood, they tended to show the great amount of assimilative power possessed by the foetal tissues. In hypertrophy from exercise, the nutritive force was believed to be increased in consequence of the demand for a quantity of tissue adequate to perform the increased amount of duty. In hypertrophy from long-continued afflux of blood, Dr. Henry believed that it was only tissues of a low organisation—certainly not muscles or nerves—that could assume increased growth. In the

vicinity of old ulcers, there was frequently a growth of hairs—an epidermic tissue.

3. Atrophy was considered according to its occurrence from diminished supply of blood, from cessation or impairment of the functions of an organ, from over-exertion, or exhaustive exercise, and as general atrophy in fevers, &c. Of atrophy from over-exercise of a part, the instances adduced were, the effects of long-continued pressure on the epidermis, and the *atrophy musculaire progressive*, lately described by M. Aran, of Paris, and both were considered as connected with exhaustion of the assimilative power engaged in repairing the waste of tissues. Dr. Henry then referred to the views of Dr. Hodgkin on the non-removal of the products of the waste of tissues during fever, and believed that the reparative power was impaired: this would explain the want of appetite, and the danger of too rapidly improving the state of the blood during convalescence. The paper concluded with a few therapeutic observations.

Nothing occurred during the very discursive debate, which we should deem needful to be transferred to our columns.

ETHNOLOGICAL SOCIETY.

January 15.

SIR JAMES CLARK, Bart., M.D., V.P. in the chair.

A paper “ON THE DAMARA COUNTRY,” by F. N. Kolbe was read.

THIS was a paper sent by Lord Grey, Secretary for the Colonies for the information of the Ethnological Society. That country on the western coast of Africa, which commences from the 25° of S. latitude, and is known as Damara land; it is inhabited by a nation consisting of two tribes—the Ovaherero and the Ovampantera. Damara land is bounded on the west by the Atlantic ocean, the north and east boundaries are as yet unascertained, the bordering nations to the south are the great Namaquas and the Hill Damaras. Eastward is the Ovattjaona tribe, which lives on the banks of the newly-discovered lake. There are other tribes residing near the lake, which speak a dialect of the Damara language. Northward is a tribe, the Ovampo, of Negro race, living in large villages, in a fertile country, and governed by a king. They cultivate their fields, work in trades, and export slaves from amongst them. There are no clicks in their language, which is so similar to that of Damara land that the natives can converse together. The southern part of Damara land is hilly; the northern part consists of extensive plains covered with thorn bushes, low shrubs, and grass. The rivers are periodical, and compared with Namaqua land, the country is well watered. On the banks of the rivers, grow tall and thick trees, chiefly of the *Acacia* kind. In addition to numerous springs, the natives have dug so many wells that there is no lack of water in travelling. The Damaras are about forty thousand in number. They belong to the Kafir race—as is evidenced by their physical conformation, habits, religious ideas and language. They are nomadic, and have no agricultural habits; but are rich in cattle and sheep, which, supplying them both with food and clothes, there is but little necessity for trade and barter. Assagais and other iron implements they obtain from the Ovampo, and also from the Cape through the Namaquas. The Damaras are divided into tribes, each tribe being governed by a chief, who has inferior chiefs to rule under him. Each sub-chief rules over a village, containing from one hundred to four hundred people. The government is arbitrary; but the chiefs venerate the customs and traditions of their ancestors, and tyranny is little known amongst them. They practise circumcision, offer sacrifices of beasts to, and pray to the shades of the dead.

The honorary secretary then introduced a Kafir man, a Zoolu man and his wife, an Amapondas woman with her infant three weeks old, born since her arrival in England. After briefly describing some of the peculiarities of the Kafir language, especially its euphonic and alliterative characters, together with its softened dialect as spoken by the Zoolus, in which there is a less number of clicks, Mr. Cull drew attention to the physical conformation of the Kafir race as distinguished from the negro and the European, which he rather fully described and illustrated by the specimens then present. A discussion ensued, in which Sir James Clark, Count Rosen, Capt. Fitzroy, R.N., Dr. Hodgkin, Mr. Catlin, and others, took part.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 14th, 1851.

S. SOLLY, Esq., F.R.S., Vice-President, in the Chair.

(Continued from page 66, vol. ii.)

CASES OF RUPTURE OF THE LIVER AND SPLEEN.

By ATHOL JOHNSON, Esq., F.R.C.S.

Lecturer on Physiology at St. George's Hospital, Surgeon to the St. George's and St. James' Dispensary, &c.

THE author narrates five cases of this formidable injury which came under his care at St. George's Hospital. In the first case, death took place almost immediately; the second and third proved fatal at the end of the third day, in each case after some exertion made by the patient; in the fourth case, there was very extensive laceration of the liver, with slight rupture of the kidney, but these were found to be perfectly united, and to have healed in a beautiful manner without any trace of inflammation, when the death of the patient, three weeks after the accident, owing to a totally distinct injury, (fracture of the spine, in the cervical region,) afforded an opportunity for a *post-mortem* inspection; the fifth case, in which the symptoms of rupture of the liver appeared well-marked, recovered. The author remarks, that this kind of accident is by no means uncommon, as hospital records prove; that the symptoms are usually sufficiently characteristic, viz., intense pain in the abdomen, especially in the region of the liver or spleen, coming on immediately after a very blow in that situation; extreme collapse, combined with a severe exsanguine appearance of the patient, and a certain amount of distension of the belly, this distension not being entirely tympanitic. The pain so much complained of, in the first instance, is probably not inflammatory, as no traces of inflammation were found in the first four cases examined after death. Subsequently, of course, inflammation may, and very often does, succeed, and is attended with the usual symptoms. The author remarks, that this injury is often considered to be necessarily fatal, it being usually doubted, if the patient gets well, whether any rupture had actually taken place; he therefore considers the fourth case related by him as peculiarly interesting, as in this instance the subsequent death of the patient from another cause, allowed it to be actually demonstrated that there had been rupture of the liver, which had healed without any bad consequences to the patient. This appears to be the only case of the kind on record. The treatment, the author thinks, should be directed to the following points:—1. Rather to favour the state of collapse, guarding, of course, against its going too far, in the hopes of checking the hæmorrhage at the time, and allowing coagulation to take place, so as to arrest it in a more permanent manner. 2. To keep the patient in a state of the most perfect rest, not allowing him to make an exertion of any kind himself, and to place him in such a position that breathing may be carried on with the least possible disturbance of the abdominal viscera. 3. To prevent the patient from tossing about, as he is inclined to do from the violence of the pain, and so tending to produce fresh hæmorrhage, by means of the free administration of opiates, such as morphia in camphor mixture, with a little ether, if the collapse be excessive. If inflammation supervene, it should be treated, of course, in the usual manner.

Mr. Solly explained, that the second paper had been read immediately after the first, as it bore somewhat on its pathology; but he trusted that Mr. Robinson's paper would not be forgotten. He hoped to hear some observations from those gentlemen present, who were acquainted with the influence of these tumours during gestation, &c. The first case was peculiar from the length of time the patient survived after the laceration had apparently taken place. Such instances are not often met with in surgery; it presented quite a new feature.

Mr. Lloyd wished to offer a few observations, not so much on the first case, as on a point of interest connected with it. It was stated that there were three pints of fluid blood in the cavity of the abdomen, and a speculative opinion had been offered, as to whether this effusion had been immediate or gradual. It appeared that the patient suffered from peritonitis subsequently to a considerable extent, and he thought, therefore, that the great bulk of the fluid might be serum, coloured by blood, and not all blood. The other cases, those of Mr. Athol Johnson, were very interesting, and lead to a point of practice in surgery. They were of frequent occurrence, and he had seen many such during the thirty years he had been connected with Bartholomew's. The results of his experience were, that if the effusion was very large, the patient dies rather quickly—sinks rapidly. There is great pain at first, but the symptoms are not generally those of peritonitis, nor of inflammatory action. When the effusion is not so great, they mostly die of peritonitis; but if properly treated, they

may live some time. He had seen patients under such circumstances survive for weeks, and even for months, and then die, the *post mortem* examination disclosing evidence of the rupture of some important organ. The treatment that should be adopted, should be that for peritonitis, but not be too heroic. He had seen in such cases repeated attacks of peritonitis, which had been always thus subdued, but the case at last generally ended fatally. But he had also seen cases in which the symptoms had indicated the rupture of some important organ, but by the treatment he had alluded to, the repeated attacks of inflammation had been subdued, and the patient had ultimately got well. If the peritonitis be attacked heroically, the sufferer will die, because the effusion into the cavity of the abdomen is a persistent cause, always leading to the excitement of fresh inflammation, and the patient cannot bear up against the treatment pursued.

Dr. Reid had not had the good fortune to hear all the first paper read, but he thought there was some reference made to the induction of premature labour in these cases. He then mentioned the case of a lady, who had a large fibrous tumour of the uterus, and was twice pregnant after it had formed. She suffered greatly during gestation, but her labour was not at all difficult, nor was it attended with danger. He thought that this case would show the propriety of not interfering too much.

Dr. Heale drew attention to the fact, that on opening the body of Mr. Robinson's patient, the blood was found in an uncoagulated state. He had often found this to be the case in *post mortem* examinations; but on its removal from the body, the fluid soon coagulated, thus showing the persistence of some cause after death, preventing the coagulability of the blood, while in the body. He thought this was an important point, both in physiology and pathology.

Dr. Oldham considered Mr. Robinson's case to be one of great interest. He had examined the tumour; it is a fibrous tumour, but he (Dr. O.) thought that that which had been called erectile tissue, was, in truth, the uterine tissue covering the tumour, the veins being enlarged in consequence of pregnancy. With respect to the cause of the rupture, he could not quite concur in the opinion given by Mr. Robinson, that it was induced by the entanglement of the tumour with the intestines, and its consequent inability to follow the movements of the uterus when contracting, and thence its laceration. He could not find anything to corroborate this impression in either the history or the symptoms of the case, and there were not any old adhesions of the intestines discovered at the *post-mortem* examination of the body. He himself thought that it had happened after the separation of the placenta, when the uterus would rapidly recede from the cavity of the abdomen into the pelvis, when the tumour would itself offer the great mass of resistance, and there would be a great angle of resistance at the little margin where the laceration occurred. He had seen this occur sometimes, irrespective of a tumour. In one case, where the peritoneum had lost its elasticity and was thickened, and opaque, a slight fissure occurred, with considerable hæmorrhage, the subjacent veins being torn across, and death. He thought that something similar had happened in this case, with, probably, an antecedent change in the peritoneum, which, perhaps, had lost its vital elasticity. The question as to the propriety of induction of premature labour is one of great importance in these cases. He had had three cases of fibrous tumour of the fundus uteri in the midwifery ward of Guy's Hospital. One of the patients had been confined twice; the last about a few months ago. The cases differed so far from Mr. Robinson's, that the pedicle was more slender, and the tumour more moveable, and it was consequently more removed from any source of danger. The patients recovered without difficulty or danger; had the tumour been internal, as he supposed was the case in the instance mentioned by Dr. Reid, there might be greater danger, from hæmorrhage from the uterine veins. This was not the case in the patients to whom he had alluded. In one of these instances, the woman was delivered of twins by a pupil, and yet no harm resulted.

Dr. Lee observed that in only one case of these tumours had he felt himself called upon to interfere, and in that the tumour grew very rapidly. When the fibrous tumour was internal to the womb, and lay before the child, then it became necessary to interfere. In such cases it was sometimes requisite to perform craniotomy. He could not imagine any cases in which the tumour was connected with the fundus uteri, where such interference was necessary, unless the tumour increased in size very rapidly. These tumours are situated in different parts of the walls of the uterus. In some cases, where they occupy a low part, they are pushed down by the uterine contractions into the vagina, and become fibrous polypi. Sterility is the result under such circumstances, but not so when the middle part of the uterine walls is the seat

of the tumour. Then abortion is often the consequence of their presence, because the womb cannot dilate as the foetus and its appendages increase in size. When they are located under the peritoneal coat, they do not interfere with pregnancy, and it is not right to interfere with them, unless they grow very rapidly and cause great oppression and distension. He had seen many cases of these tumours where death had followed parturition; he had seen the uterine walls soften; had met with hæmorrhage and puerperal fever, but no case similar to the present, which is unique. The Society was much indebted to Mr. Robinson for bringing the case forward, as it would enable them to complete the history of this disease, which has been much investigated. Dr. Lee then alluded to the diagnosis between these tumours and ovarian disease, and said that since the last discussion on ovariectomy, the last patient operated on by Mr. Lizars had died. The operation was commenced, but was not completed, twenty-five years ago. In his analysis of cases of ovariectomy, read at a previous meeting of the society, he had described the tumour as being solid and vascular, and that it could not be removed. The *post-mortem* examination showed the presence of a large pediculated, uterine tumour, adhering to the omentum, of the fibrous character, not ovarian, but resembling that on the table. The ovaries were healthy. The existence of very large blood-vessels, chiefly veins extending from the tumour to the omentum, had precluded the completion of the operation.

Mr. Solly remarked, that in Mr. Athol Johnson's cases, it was said, that the alteration of position had in several cases caused the fatal termination. In such cases a strap should be placed over the bed, not so much to prevent the patient's moving, as a warning that he should not do so. The nurse cannot always prevent it.

Mr. Robinson, in reply to Mr. Lloyd's remark, as to the fluid effused being blood or serum, said it would be difficult to say, unless the serum greatly preponderated over the blood. He would not attempt to say how much was serum, and how much blood, but the fact that the patient never thoroughly rallied from the state of collapse, led him to believe it was chiefly blood. The peritonitis was of small extent, and of the atonic character. There might still, however, be some serum mixed with it. His was the only case he knew of, where there was effusion of blood into a cavity without coagula: in a case alluded to by him in the paper, where four pints of blood had been effused, there were several. Dr. Oldham was of opinion, that the walls of the tumour consisted of the uterine tissue. His (Dr. O's) investigations were very numerous, and he would yield to that opinion, but he had described three divisions of the tumour, so that, if Dr. Oldham were right, two thirds of its bulk were composed of uterine tissue. The Doctor's opinion respecting the entanglement of the tumour with the intestines was, he thought, a distinction without a difference. The great point he sought to establish was, that the tumour was held back, and that the rupture was thus caused. He still thought that the tumour, which continued growing while the uterus was in the abdomen, had got entangled among the intestines, and that the rupture was thus caused, the peritoneum covering it being on the stretch. Dr. Oldham's cases were not in point. With respect to the induction of premature labour, he only threw out the suggestion, that in certain cases it was admissible. He did not mean in such an instance as this, but that his case afforded additional evidence of the propriety of such interference. Dr. Lee's reasons for interfering were very good; when the tumour is so large as to prevent the child's passing, it becomes necessary to operate, for the safety of both mother and child.

Mr. Athol Johnson said, that one reason why he had brought his cases forward, was to ascertain whether any had ever been published in which rupture of the liver, spleen, &c., had been recovered from. He would be glad to learn from the fellows present if they knew of any such. His cases had shown that such an injury was not necessarily fatal.

Dr. Copland remarked, that Mr. A. Johnson's cases were so important, he regretted they had not met with more attention. A man falling from a height, or who has had a heavy body pass over him, is killed by the concussion and injury to the spinal cord, or by the rupture of an internal organ, such as the liver or spleen, by the consequent hæmorrhage. The fourth case shows that the latter injury is not of necessity fatal, and that such a rupture, if not to a great extent, and if appropriately treated, may be recovered from. He fully agreed in the suggestions and plan of treatment recommended in the paper.

Mr. Solly said, that Mr. Lloyd had spoken of his experience of thirty years at St. Bartholomew's. He might mention twenty-seven years at St. Thomas', during which he had not seen a case

of rupture of the liver or spleen recovered from, nor had he observed in the dead-house a cicatrix in either of those organs.

Mr. Lloyd stated that the impression on his mind was that he had seen such a cicatrix, but he was not quite certain of it. He thought he had seen in the liver and spleen appearances indicative of old, antecedent ruptures. Dr. Copland had said that in these accidents patients die from the concussion and injury to the spine, or from the rupture. This is generally correct, but not always. He had had a case lately where the patient died in two days. The autopsy showed that there was not any organ ruptured, but active peritonitis had been set up. The poor fellow had been violently thrown against a stone step.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CXL.—GAMBLER*—A NEW REMEDY FROM CHINA, SUCCESSFULLY EMPLOYED IN THE TREATMENT OF INTERMITTENT FEVER, BY CHAS. DUMARS, OF MONTPELLIER—*Case 1.*—A young woman, 26 years of age, of nervous temperament, and strong and healthy constitution, having always enjoyed perfect health, went with her husband to inhabit a country house, situated in the Commune de Lattes, a place infected in the summer with poisonous malaria arising from the surrounding marshes. She was attacked twenty days after her arrival (in the month of June) with violent intermitting tertian fever; she remained about two hours in the cold, and as long in the hot fit. She was seven months advanced in pregnancy, and fearing a miscarriage, her friends called in a physician, who prescribed for her a very strong dose of sulphate of quinine. Fifteen days passed, and the fits which had been tertian became quotidian. The dose of the sulphate was increased, but without effect. At last resin of quina was tried, and two draughts, each containing eight grammes of this substance, one gramme of sulphate of quinine, the same of salt of wormwood, five centigrammes of extract of opium, were given, but the fever continued to increase. At length during a violent cold fit, the patient miscarried, and the child died three days afterwards.

Unwilling to nurse a strange child, she contented herself with suckling a dog; as she had much milk, the nipples became hard and knotty; abscesses formed at several points, and she was then removed to Montpellier, there to remain, in the hope that our delightful climate might restore her.

The day after her arrival, a fresh attack came on; I was sent for, and found her in a state of weakness, emaciation and irritation difficult to describe, the pulse hard and intermittent; tongue very red and skin burning. It was my task to combat the overwhelming fever and yet to renounce the sulphate of quinine, which had proved so inefficacious. I did not hesitate to prescribe Dr. Baud's pills of hydro-ferro-cyanide of potash and urea, and recommended ten to be taken on the accession of the cold fit; the next day at noon the fever came on, ten pills were immediately taken, and in twelve minutes the most perfect calm ensued; the patient was literally covered with sweat, fell asleep, and on waking three hours afterwards partook of some soup, rose and walked about her chamber. The pills were continued, ten every six hours, and the fever did not return. For a month the cure was complete; but eight days after the woman's return to Lattes the fever recommenced. The mother came to ask me for the prescription of the pills, of which she took back a bottle containing forty, but this time the hydro-ferro-cyanide of potash and urea was without effect.

Having read in an interesting work (*Journal d'un Voyage en China*) by M. Itier, Directeur des Douanes at Montpellier, that the Chinese physicians prescribe *Gambier* in diarrhoea, intermittent fever, dysentery, &c., I was tempted to make trial of it. I repaired to M. Itier, and acquainted him with my project, "You are right" he replied. "I can assure you, that during my sojourn at Singapore I have seen it employed by the Chinese physicians in intermittent fevers, and they assured me of its uniform success." As he kindly placed some at my disposal, I prepared thirty pills, each containing thirty centigrammes of *gambier*, and ordered the woman to take two every three hours before the attack.

The next day the fever disappeared, and for three months she has been well, not having experienced the slightest indisposition or inconvenience; her original *embonpoint* has returned. In a word, she is cured, and thirty pills have been sufficient.

On reading this case, it is evident that sulphate of quinine, resin of quina, and Dr. Baud's pills of hydro-ferro-cyanide of potassium

* In a future number we shall publish an account of this new medicine extracted from the work of M. Itier.

and urea proved unsuccessful, and that *gambier* alone gave the favourable result. If this astringent possesses such powerful curative properties in intermittent fever, I shall have the gratification of being the first physician in France to use it; but science and humanity are indebted to M. Itier for the knowledge of this remedy.

Case 2.—The wife of *Sieur Marette*, overseer of the Customs at Gramenet,* thirty years of age, of strong and healthy constitution, and of nervo-sanguineous temperament, was attacked with a violent quotidian fever, which could not be arrested by the sulphate of quinine, which I gave her in strong doses. She was scarcely four days without an attack.

As she was nursing, and fearing to cause irritation by continuing the sulphate, I gave her thirty pills, each containing fifteen centigrammes of *gambier*, and scarcely had she taken them, when the cure was complete. Her child, eleven months old, which had suffered from intermittent tertian fever, which would not yield to the employment of syrup of quina, has not shown the slightest symptom since its mother took the *gambier*.

Case 3.—A woman, aged 40, of nervo-sanguineous temperament, and most robust constitution, the wife of *Sieur Faur Cavale*, overseer of the Customs, at Gramenet, was attacked on the 1st of August, with violent vomiting, accompanied with delirium and an insupportable pricking sensation of the stomach. Called in to see her on the same day, I learned from her husband, that on the previous day, at the same hour, she had had a similar attack. I had then no doubt of having to deal with intermittent quotidian fever; but as the patient suffered much more from the prickings in the stomach, than from the accession of fever, and only vomited when the former became intense, I asked if she was not subject to worms. Upon an affirmative answer, I thought it reasonable to combat the two affections at the same time, and prepared a mixture composed of decoction of kina, tincture of castor, and camomel *à la vapeur*, to be taken a spoonful every hour. The vomitings ceased after the fourth spoonful; but on the next day at the same hour, the same symptoms reappeared, and the patient vomited a worm seven inches long. On my second visit, I found her extremely prostrate, pulse hard, countenance excited, eyes suffused, skin burning, tongue red; the menses had come on in the night. I had scarcely left her, when she was attacked with violent shiverings, and prickings in the stomach. She then vomited two more worms; and some hours afterwards, she passed a third by the bowels.

Four or five days passed in perfect tranquillity; but on the sixth, a violent accession of fever came on. I prescribed one grain of sulphate of quinine, divided into six doses, to be taken every three hours. On the seventh, eighth, and ninth days, the fever was scarcely perceptible, but it returned on the tenth with greater violence than ever. I decided on giving a draught composed of resin of kina, sulphate of quinine, and salt of wormwood. The fever entirely ceased. Two days afterwards she partook of some broth, ate on the third day, rose, and experienced no other symptom; but on the 22nd of September, the fever was manifested afresh, and became quotidian.

Afraid of irritating the stomach by administering another dose of quinine, I requested M. Honoré Gay, professor in the pharmaceutical school of Montpellier, (a chemist alike distinguished for his talent and modesty) to prepare me forty pastilles of chocolate with the hydro-ferro-cyanide of potash, and urea, similar to those of Dr. Baud.

The patient took ten from the commencement of the attack: the cold fit was checked; eight minutes afterwards she slept, and on being awakened after three hours refreshing slumber, felt so well that she got up.

The remaining pastilles were taken ten every six hours, and the fever altogether disappeared. A month after her cure, presuming on her physical strength, and good health (for she said she felt as if she had never been ill) she had the imprudence to wash her linen in the canal opposite the Custom-house of Gramenet, and the fever returned the same evening. I was sent for on the third day, and I found her in the cold fit; the fever was quotidian. Desiring again to try the *gambier*, I sent thirty pills, each containing fifteen centigrammes of this astringent—she took two every three hours; since which there has been no relapse, notwithstanding some imprudence on the part of the patient.

Case 4.—Le *Sieur Carrere*, 34 years of age, of bilious-sanguineous temperament and of excellent constitution, being on duty at the Custom-house, on the night of the 21st of August, felt

slight shiverings, which he at first attributed to a strong south wind; he had recourse to walking in long strides in order to bring on reaction, and in an hour, an excessive heat spread over his body. Being then released by another sentry, he immediately went to bed, and the next day at noon the fit returned; also on the 23rd, at the same hour. I was sent for to attend him, and found my patient voiding yellow stools, the tongue extremely foul, and breath fetid; he complained also of great weight and oppression at the stomach.

I prescribed an emetic of ipecacuanha and antimony; the patient vomited an enormous quantity of bile and felt much relieved.

26th. A bottle of Seidlitz water as a purgative; stool much charged with bile.

27th and 28th. Being perfectly tranquil, I thought it better to wait, knowing that in former years this treatment had sufficed.

29th. Fresh attack. Prescribed 18 grammes of sulphate of quinine, to be taken every three hours.

30th and 31st. No attack.

1st and 3rd of September. Return of the fever, but it is tertian. Prescribed 90 centigrammes of sulphate of quinine, reducing the period to every two hours. The attacks continue.

Finding the sulphate fail, I administered six of Dr. Baud's pills of hydro-ferro-cyanide of potash and urea. The patient passed six days without fever, but on the seventh the fit returned with greater violence than ever (the cold and hot fits each continuing two hours.) I had then recourse to thirty *gambier* pills, each containing 15 centigrammes, to be taken every two hours. The cure was complete. Up to the 26th of October, there was no relapse.

Case 5.—A dealer in fish, aged 42, of good constitution, temperament bilio-sanguineous, living in the neighbourhood of the cottages of Gramenet, having never had any ailment but intermittent fever, came to consult me on the 21st of August. He had already had three attacks; the cold fit, which lasted an hour, being accompanied with vomitings of bile. The tongue was very foul; mouth clammy; fæces yellow. I administered emetics on the 22nd, purgatives on the 24th, and the patient being then pretty well, I determined to stop.

30th. The fever again appeared, the cold fit was terrible; during two full hours, the patient shivered; the hot fit was excessive.

September 1st.—Another attack equally violent.

2nd. He demanded a fresh prescription, saying, "he would rather die than take sulphate of quinine." I then sent him thirty pills, each containing fifteen centigrammes of *gambier*, ordering three to be taken every two hours. The fever did not return.

Case 6.—Aged 24 years, of nervo-sanguineous temperament, of excellent constitution, the wife of *Sieur Noyez*, overseer at Gramenet, was, twelve days after her arrival at that place, attacked with intermittent quotidian fever, the fits, hot and cold, lasting nearly four hours. As, on consulting me, she complained of great dislike to food, I did not hesitate on seeing the state of her tongue, to prescribe sixty-four grammes of castor oil. This purgative acted well, and the patient was six or eight days without an attack, but on the ninth or tenth day it re-appeared. This patient also disliking sulphate of quinine, I had then recourse to pills of *gambier*, and sent thirty, of fifteen centigrammes each, to be taken as prescribed above, and the fever disappeared.

Case 7.—A child, about eight years of age, was attacked, since the month of August, with intermittent tertian fever, which yielded to none of the means employed by the physician who attended it, and the parents tired of medicaments resolved to trust to nature, and began by putting the child on good diet, which it greatly needed, as it was a mere skeleton.

Having heard that I had a new remedy which contained no quinine, the father came to entreat me to have pity on his child. I sent twenty pills of *gambier*, of fifteen centigrammes each, and hardly was the tenth arrived at, when the fever ceased, and did not again return.

The young patient having an unconquerable aversion to pills, they were dissolved in a cup of sugared water, and were thus taken two at a time, during the fits, every four hours.—*Gazette Medicale de Montpellier*, January, 15th 1851.

CXLI.—CASE OF TOTAL ABSENCE OF THE UTERUS. By DR. ZIEHL, NEUREMBERG.—J. J., aged 57, married at 32, had enjoyed until the latter years of her life excellent health. She had never menstruated, but there was occasionally a considerable mucons discharge from the vagina. She was of natural conformation and the breasts well developed; her voice and habits were those of her sex. Coition was never complete, and she was indifferent to

* The most unhealthy residence of the Capitainerie of Villeneuve, a locality infected with the most pestilential miasma, arising partly from the neighbouring canal, from the marshes, and from a ditch of muddy, stagnant, and putrid water, surrounding the salines. It is exactly two metres distance from this ditch that the domaniers have their station.

it. During the latter part of her life, she evinced extreme nervous sensibility and became very weak. She died on the 8th June, 1849, of phthisis tuberculosis. Her three sisters, two of whom are still living, have always menstruated regularly.

Autopsy.—Lungs filled with tubercles, partly developed and soft; heart, liver, spleen, kidneys, ureters and bladder all in a normal condition. The labia and clitoris were completely developed: the vagina was so narrow that the index finger could with difficulty be introduced; it was an inch long and terminated in a cul-de-sac. No trace of the uterus was found. The Fallopian tubes were found in the ligaments placed behind the bladder. Behind and under the Fallopian tubes were placed the ovaries, of dry and firm structure, wrinkled on the surface, but containing in the interior small compact granular bodies. The uterus was wholly wanting; there was not even the slightest rudiment of this organ.—*Gazette Medicale de Paris*, January, 1851.

CXLII.—CASE OF CHLOROSIS, ACCOMPANIED WITH PARALYSIS. By M. G. J. SWERON.—Marie Van A., 17 years of age, of lymphatic constitution, and irregular, had for some time complained of uneasiness, general weakness, head-ache, indigestion, and difficulty of breathing on the least exertion. She had consulted a physician, who prescribed leeches to the genital parts, and occasionally purgative pills and saffron tea, but, finding her condition rather aggravated than improved, she had recourse to *quacks*, who promised her a speedy cure by decoctions of various herbs. Her health daily becoming worse, in spite of the fallacious promises of the impostors and infamous speculators in whom she had confided, she abandoned them, and applied to me.

The patient was manifestly a prey to dyscrasia; the face and entire skin were pale, and of yellowish tinge; the lips were discoloured; the conjunctiva bluish; head-ache intense; frequent palpitations and difficult breathing; at times violent pain in the bowels, accompanied with diarrhoea; pulse small and quick; in a word, I observed every symptom of advanced chlorosis. Hygienic measures and chalybeates constituted the chief treatment. The patient was placed in a spacious, dry, airy chamber, and properly and warmly clad; the whole surface of the body was rubbed morning and evening with a hot flannel and aromatic substances. I made her take the air when the weather would permit; a nourishing diet in small quantities was administered at the same time with the soluble preparations of iron, such as the muriate, lactate, and iodide of iron. The day after this prescription I was sent for in haste to my patient, who was said to be seized with apoplexy, and I found on my arrival the whole of the right side paralysed, the eyes fixed, and loss of speech. Nothing was altered in the treatment, save the application for some days of mustard to the calves of the legs, with the view of causing counter irritation. These means were persevered in, and the hemiplegia disappeared correspondently with the reconstitution and restored activity of the principles which the blood had lost, viz., the globules. Persevering in this course, and convinced of its efficacy, I had the satisfaction of seeing the paralytic symptoms disappear in three weeks; and in about three months the health of the patient was completely re-established.

This remarkable case is an additional proof that the use of iron must be long continued, inasmuch as the regeneration of the globules, the absence of which constitutes the malady, is a very slow process.—*Journal de Médecine de Bruxelles*.

CXLIII.—CASE OF SPONTANEOUS CURE OF POPLITEAL ANEURISM. By JAMES SYME, Esq., Edinburgh.—T. M., aged 35, a seaman, sent from Banff by Dr. Milne, to be under my care, on account of an aneurism in the left popliteal artery, was admitted into the hospital on November 18. The tumour filled the popliteal space, and pulsated strongly. It was first noticed about six months before, by the patient, after lying one night with his leg hanging over the edge of his hammock. He had been either at sea, or actively engaged in harbour duties, ever since, and always remarked that exertion was followed by an increase of pain. With exception of occasional rheumatic pains, he had enjoyed good health.

Having come so far, nearly 200 miles, the patient was kept quiet in bed, with restricted diet and gentle aperients, to prepare him for the operation. In the course of a day or two, the aneurismal pulsation became much less distinct, and could not be felt at all on the 23rd, when the tumour was also observed to be greatly reduced in size, and no longer the source of any uneasiness. On the 9th of December, the patient being completely relieved from the disease, proceeded homewards.

A case precisely similar to the one just related, occurred under my care some years ago. The patient having come over from

Kirkcaldy, in Fife, where he had pursued his occupation as a weaver until the day he was admitted into the hospital, when the perfect rest there afforded was immediately followed by coagulation and the other steps of a spontaneous cure. These facts seem to suggest a suspicion that the one or two very rare instances of pressure being quickly followed by recovery, may really have owed the beneficial change to assistance of the *vis medicatrix*, from rest in the horizontal posture, and not to the effect of compression. Certain it is, that if the two cases just mentioned had been subjected to pressure, they would have appeared triumphant examples of its successful employment. The Dublin writers allege that no confidence can be placed in trials of pressure on this side of the Irish Channel, accounting for all its failures and bad consequences by attributing them, with characteristic frankness, to prejudice and ignorance on the part of the operators. Well aware of this peculiarity in the estimation of evidence, I have calculated the average length of time requisite for the duration of pressure, from the facts supplied by the advocates of this system. In twenty-three cases of aneurism, reported by Dr. Bellingham, from the practice of seventeen surgeons, as successfully treated by pressure, I find that the average duration, not of the treatment, but of the actual compression, excluding the intervals of its discontinuance, amounted to thirty-eight days. Thirty-eight days and nights of misery, to escape a few minutes of trivial uneasiness!

If the cases treated in the Dublin hospitals since the publication of Dr. Bellingham's work, have been more protracted than those he has recorded, it would be well to acquaint the profession with them. But if this be done, I trust that the results of all cases will be given, together with a full statement of the means required to render the patients able to endure the prolonged torment of compression.—*Monthly Journal of Medical Science*, January, 1851.

MEDICAL NEWS.

THE PUBLIC HEALTH.

(From the Weekly Return of the Registrar-General.)

The present return exhibits a decrease in the mortality of the Metropolitan districts during the week that ended last Saturday; the deaths, which in the two preceding weeks were 1023 and 1037, having now fallen to 956. Taking corresponding weeks of the ten years (1841-50), the lowest return was made in 1846, when the deaths registered were only 908, in a week of unusually high temperature, the mean of which rose about ten degrees above the average; and the highest occurred in 1848, namely, 1457 deaths, when influenza had not disappeared, when other epidemics abounded, and the mean temperature was singularly low, having fallen nearly as much below the average as in 1846 it had been above it. The average number of deaths in the ten corresponding weeks was 1104, compared with which (without any correction for supposed increase of population) the account for last week presents a favourable result. But an inspection of the Tables of Ages and Fatal Diseases shows, that though there is a marked diminution of mortality from bronchitis, which had previously thinned the ranks of the aged, who are the greatest sufferers by it; and though the number who die from what is rather vaguely described as "old age," has declined from 46 in the preceding week to 35 in the last, and in some complaints common to the young there is also a decrease; yet pneumonia, which is principally fatal to children, has actually increased, and in the epidemic class small-pox and fever exhibit a considerable advance. Zymotic or epidemic diseases in the aggregate have risen from 196 in the previous week to 211 in the last; small-pox from 21 to 32. Of these 32 deaths, 9 occurred above 15 years of age, and in only two cases, out of the whole number from small-pox, does it appear probable that vaccination had been properly performed.

Eight of the deaths from small-pox occurred between the 18th and 25th January in the Hospital for this disease, which was recently removed to Holloway; and with the exception of a child aged 16 months, which had been brought from Rosemary-lane, the ages of the patients ranged from 16 to 23 years. Two were seamen brought from the Dreadnought Hospital ship; three female servants from Mortlake and Marylebone; a married woman from Clerkenwell; and a porter from St. Giles. All the cases are described as "confluent, unprotected," excepting that of a sailor, who is stated to have died from "small-pox, confluent, unmodified (9 days), dysentery (several months), vaccinated when young—no cicatrix."

The Registrars again report various families, which have been fatally visited by this disease, and where vaccination is neglected from "prejudice entertained against it." A house in St. Giles is mentioned, in which a child has died, and six persons are now suffering from the same complaint; and the medical attendant adds, that the only child that has escaped is one of two months, which had been vaccinated in the Workhouse. In Boswell-court (St. George-the-Martyr), where a child had died without vaccination, the mother and four children are now labouring under small-pox.

In the returns of the week, a child of two years, is stated in the

medical certificate, to have died of "exhaustion from pytalism." Two men died from intemperance.

The births of 764 boys and 759 girls, in all 1,523 children, were registered in the week. The average of six corresponding weeks in 1845-50, is 1,382.

At the Royal Observatory, Greenwich, the mean daily reading of the barometer was above 30 in. on Thursday and Friday; the mean of the week was 29.850 in. The mean daily temperature was 45°·8 on Tuesday, when it was highest; and 31°·7 on Friday, when it was lowest. The mean of the week was 40°·1, which is 2°·3 above the average of the same week in ten years. The daily mean was from 4 to 8 degrees above the averages of the several days, on Sunday, Monday, and Tuesday; it then declined till it fell considerably below the average on Friday, when fog prevailed, and continued below it on Saturday. The wind was, for the most part, in the south-west.

The following selections are made from the Registrars' Reports:—
In Marylebone, at 3, Hereford street, Lisson-grove, on 21st January, the son of a carpenter, aged 5 years, died of "confluent small-pox (2 weeks), not vaccinated." The medical attendant states that "the sister of this child died three weeks ago, with typhoid symptoms, in the premonitory stage of small-pox."

In Pancras, Tottenham sub-district, at 3, Beaumont-place, on 15th January, the son of a shoemaker, aged 1½ years, died of "variola (10 days)." Mr. Wells describes the place as "close, crowded, and badly drained."

In Pancras, Camden Town sub-district, at 3, Cambridge-crescent, Agar Town, on 19th January, the daughter of a bricklayer's labourer, aged 6 weeks, died of "pneumonia." "This place," says Mr. Holl, "which I have so often reported, is in as bad condition as ever. The wet and mud are intolerable, and the houses scarcely habitable." Another house, situated in a deplorable locality (18, Spann's-buildings), where a child, a year old, died of "inguinal hernia from birth, and diarrhoea (2 weeks)," is described by the informant as "so damp, that he could scrape the water from the walls." In the same sub-district, at 6, Upper Edmund-street, on 19th January, the son of a tailor, aged 18 months, died of "small-pox, unprotected (10 days)." Another child had the same disease, but was recovering. "The parents not having much faith in vaccination, neglected to have any of the children vaccinated."

In St. Giles-in-the-Fields, South sub-district, at 14, Little Wild-street, on 17th January, the son of a smith, aged 1 year, died of "small-pox." Mr. Faulkner observes, that "the mother of the deceased has had 12 children, none of whom have been vaccinated, owing to a prejudice she entertains against it. Another of her children has been attacked with small-pox, and there are no less than 6 people in the same house suffering from the same complaint. The medical attendant says, that the only child in this house that has escaped is one, 2 months old, which was vaccinated in the workhouse."

In Holborn, sub-district of St. George-the-Martyr, at 9, Boswell-court, on 17th January, the son of a cabman, aged 4 months, died of "confluent small-pox (9 days)." Mr. Goodhugh remarks, that "the child had not been vaccinated, objection being entertained to the operation. The mother and 4 children are now very ill from the disease."

In Haggerston West, at 16, Dunstan-street, on 21st January, the daughter of a messenger, aged 15 weeks, died of "small-pox (8 days), not vaccinated." "The father of the deceased," says Mr. Bowring, "has a very strong prejudice against vaccination. There now remain 5 children, under 12 years, none of whom have been vaccinated."

THE GUERNSEY HOSPITAL DRAINAGE COMMITTEE.

At a meeting of the ratepayers of the parish of St. Peter-Port, held in the Town Church on Tuesday, the 14th instant, auditors were named to examine the accounts of several parochial officers, and also those of the committee intrusted with the drainage and general improvement of the sanitary state of the hospital. Dr. De Lisle read a report, which the demands on our space will not permit us to give in full:—

The committee appointed by the parish of St. Peter-Port, on the 22nd August, 1849, to carry out the drainage of the hospital, and the construction of wash-places and water-closets for the use of the inmates, having completed their labours, beg to lay the following report before the ratepayers, and to request the nomination of auditors to examine their accounts.

The parish are aware that, in the month of August, 1849, the cholera commenced its destructive career in this island within the walls of the hospital, that twenty cases proved fatal between the 1st and 25th, and that the ravages of this epidemic amongst the inmates did not cease until their removal to healthier localities.

The administration of the hospital, with praiseworthy alacrity, ordered an inquiry into the sanitary condition of that establishment; and for that purpose named a committee, composed of Messrs. Goodwin, Mollet, and Lihou. These gentlemen, in their report, dated 6th August, represent the drains "as most defective;" and in the girls' department, where the first case occurred, "it was"—as expressed in that document—"with difficulty we could remain to complete our survey, owing to the effluvia which arose from the incomplete drainage and defective traps;"—another of the many striking and instructive proofs, how inseparable are filth, foul air, and disease!

The above committee proposed:—1. To construct new drains in accordance with a plan to be furnished by Mr. Goodwin. 2. To place a

tank, capable of holding 200 hogsheads, over the wash-house in the women's yard, and a forcing-pump to supply the same. 3. To sink the well, if necessary. 4. To construct six water-closets for the women. 5. To erect three houses, each to contain six water-closets, for the other inmates—altogether, twenty-four water-closets. 6. To provide a men's bath and washing-place. 7. A boy's washing-place.

On the 22nd August, 1849, the subject was brought before the ratepayers.

The treasurers and directors declining to undertake the management of the above improvements, a new committee was named, composed of De Beauvoir De Lisle, M.D., Nicholas Heady Bisson, and Benjamin Collette, Surgeons, James B. Matthews, Daniel Mollett, Sen., Peter Lihou, and William Brouard; and the sum of £687 was voted for that purpose.

The whole of the above propositions have since been carried into effect, but it has involved a much larger outlay than was originally contemplated, viz., £1,205 4s. 8d.

Messrs. Joshua Ahier and Henry Tupper were appointed auditors, and the thanks of the meeting were voted to Dr. De Lisle for his valuable services.

NAVAL APPOINTMENTS.

Assistant-Surgeons—James S. Ayerst (1847), from the Hogue steam-guardship at Cork, to the Queen, 116, flag-ship, on the Mediterranean station; James Young, M.D. (1851), acting, to the Cumberland, 70, flag-ship of Vice-Admiral Sir George Seymour, Knight, G.C.H., fitting at Chatham for the West Indies station.

OBITUARY.

On the 21st inst., at 7, Taunton-place, Regent's-park, aged 36, John Dymock Scale, Esq., M.D., M.R.C.S. and L.A.C., third son of the late George Scale, Esq., of Aberdare, Glamorganshire, after a fortnight's illness, of inflammation of the lungs.

The Chair of Natural History and Materia Medica is vacant at Nancy.

ENCOURAGEMENT OF SCIENCE IN SPAIN.

On the proposition of the Minister of Public Instruction, Gil y Zarate, the Queen of Spain has decided that two young Professors of the University of Madrid shall be sent to France and as many to Germany, to avail themselves of the advances made in those countries in Mathematical, Natural, Physical, and Chemical Sciences. The Professors selected are M. M. Aguilar of Novella, astronomy; Villanova, natural history; Baeza, Medicine; Luna y Echeratria, chemistry.—*L'Union Medicate.*

THE HOSPITAL FOR CONSUMPTION, BROMPTON.

The late Mr. Thomas Ansaldo Hewson, of Woburn-place, among other munificent bequests to public charities, has left the sum of 1,000*l.* for the use of the Hospital for Consumption, a most valuable boon at the present time, in addition to the efforts of the Building Extension Committee.

JOURNALS RECEIVED.

London University Calendar.
London Journal.
Dublin Quarterly.

NOTICES TO CORRESPONDENTS.

JUSTITIA had better send us a list of the errors in the London and Provincial Medical Directory, of which he complains. For our part we think the whole work much improved, and are thankful that there is such a book in existence. How we managed formerly, without a Directory, seems now a puzzle to us, and considering the enormous difficulties in the way of compiling such a work, every allowance should be made for the publishers and compilers. No doubt many errors might have been avoided, if the returned circulars had been filled up in a legible hand, but medical men are not celebrated for their calligraphy.

Communications have been received from—
JAMES BRYANT, Esq., Northampton-square.
DR. SUTHERLAND, of Leamington.
JAMES GLAISHER, Esq., Royal Observatory.
J. P. WILLIAMS, Llanrwst.
HENRY HADLOW, Esq., Jewry-street.
JAMES WEARNE, Esq., Helston.
ROBERT McLACHLAN, Esq., Skelf.
WILLIAM R. MILNER, Esq., Wakefield.
S. E. HOSKINS, Esq., M.D., Guernsey.
J. FRANKERD, Esq., Langport.
DR. D'ALQUEN, Ovington-terrace.
F. A. BONNEY, Esq., Knightsbridge.
ROBERT DUNN, Esq., Norfolk-street.
CHARLES JONES, Esq., M.D., Manchester-square.
A STUDENT shall be replied to.

ERRATA in our last Number.

First column 23rd line, for "cystive," read cystine.
First column 68th line, for "Fronum," read Trommer.
Second column 32nd line, for "principal," read principle.

METEOROLOGICAL TABLE FOR THE WEEK ENDING JANUARY 25, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRIC RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Station of the Barometer above the Level of the Sea.	Mean reading of the Barometer, corrected and reduced to 32° Fahrenheit.	Mean elastic force of Vapour.	TEMPERATURE OF AIR.				MEAN TEMPERA- TURE OF		WIND. Direction.	RAIN. Amount fallen.	Mean amount of Cloud, 0-10.	AUTHORITIES AND NAMES OF OBSERVERS.									
						Highest.	Lowest.	Mean of all the Highest.	Mean of all the Lowest.	Mean.	Evaporation.					Dew Point.								
Jersey.....	49° 11'	2° 6' W.	75	30.019	27.4	37.0	34.0	53.0	37.7	15.3	45.5	43.6	41.2	3.19	0.54	0.864	546.6	grs.	W.S.W.; S.S.E.	1.4	2	0.79	5.4	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey.....	49° 33'	2° 40' W.	123	29.910	28.1	40.0	38.5	46.3	41.5	5.3	44.3	43.2	41.8	3.26	0.30	0.915	545.4	S.W.; S.E.	0.9	3	1.53	3.9	Dr. Hoskins, F.R.S., M.B.M.S.	
Truro.....	50° 17'	5° 4' W.	55	29.891	29.0	50.0	50.1	37.7	12.4	43.6	41.4	38.5	29.1	0.57	0.538	547.9	SS. W.	0.3	5	0.22	6.0	Dr. Barham.		
Exeter.....	50° 45'	3° 41' W.	140	29.827	29.4	52.7	28.2	49.2	35.6	13.6	42.2	40.5	38.0	2.87	0.44	0.846	546.5	s.w., w.s.w.	1.4	5	0.85	5.0	Dr. Shapter, M.B.M.S.	
Uckfield.....	50° 59'	0° 5' E.	180	29.827	29.2	49.0	27.0	45.6	31.7	13.9	37.9	36.7	34.8	2.61	0.29	0.901	551.5	W.S.W.	0.6	4	1.48	5.4	C. L. Prince, Esq., M.B.M.S.	
Lewisham.....	51° 29'	0° 1' W.	78	29.838	29.2	51.5	28.3	46.7	34.7	12.0	40.1	39.0	37.5	2.83	0.37	0.914	550.9	W.S.W., S.S.E.	0.5	3	0.57	6.0	H. Gordon, Esq.	
Greenwich.....	51° 28'	0° 1' W.	160	29.850	29.6	51.3	26.6	46.3	34.9	11.4	40.1	38.5	36.3	2.74	0.34	0.886	540.3	S.W.	1.5	3	0.46	—	From Reg-Gen. Report.	
St. John's Wood.....	51° 32'	0° 1' W.	150	29.656	29.0	50.2	30.0	48.2	34.9	13.3	41.3	40.7	39.9	3.07	0.15	0.954	544.4	S.W., S.S.E.	0.2	2	0.58	5.5	G. Leach, Esq., F.Z.S., M.B.M.S.	
Hartwell.....	51° 40'	0° 51' W.	250	29.690	29.6	51.0	27.5	48.6	33.8	14.8	40.0	39.1	37.8	2.86	0.23	0.938	546.4	S.E.	0.2	2	0.58	5.0	Dr. Lee, F.R.S., Treas. M.B.M.S.	
Cardington.....	52° 7'	0° 25' W.	100	29.898	29.2	50.0	28.0	45.9	34.2	11.7	39.9	38.8	37.2	2.80	0.28	0.914	530.2	S.W., S.E.	0.7	1	0.26	5.5	S.C. Whitbread, Esq., F.R.A.S., Pres. M.B.M.S.	
Norwich.....	52° 37'	1° 16' E.	39	29.937	29.2	50.0	28.0	43.5	32.5	11.0	38.2	36.9	35.0	2.50	0.32	0.892	533.7	S.W.	0.6	2	0.36	3.6	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.	
Nottingham.....	52° 58'	1° 10' W.	103	29.730	29.2	50.3	27.3	44.7	32.3	12.4	38.7	37.1	34.8	2.57	0.30	0.871	548.7	SS.W.	0.8	3	0.70	6.8	W. Brooke, Esq., F.R.A.S., M.B.M.S.	
Hawarden.....	53°	3° 0' E.	260	29.576	29.4	48.1	35.0	46.2	39.3	6.9	42.8	40.7	37.8	2.85	0.54	0.941	541.4	S.S.W.	0.2	3	0.36	6.1	Dr. Moffatt, F.R.A.S., M.B.M.S.	
Stonyhurst.....	53° 31'	2° 28' W.	381	29.418	29.8	48.5	31.7	45.9	34.8	11.1	41.2	39.5	37.1	2.79	0.42	0.869	540.1	SS.W.	1.7	5	1.37	8.1	W. R. Milner, Esq., M.B.M.S.	
Wakfield.....	53° 41'	1° 30' W.	115	29.770	29.2	52.0	25.0	46.4	33.7	12.7	39.8	35.2	33.1	2.60	0.47	0.853	548.2	SS.E., S.W.	2.0	4	0.33	6.1	Rev. A. Weld, F.R.A.S., M.B.M.S.	
Whitehaven.....	54° 33'	3° 25' W.	90	29.639	29.4	48.0	38.0	45.1	40.2	4.9	42.3	40.6	38.2	2.89	0.44	0.868	543.4	SS.W.	3.0	4	2.13	—	J. F. Miller, Esq., F.R.S., M.B.M.S.	
Glasgow.....	55° 51'	4° 48' W.	121	29.551	29.3	52.5	34.8	47.7	38.4	9.3	43.2	40.9	37.3	2.84	0.59	0.830	540.4	SS.W.	—	5	1.41	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.	
Dunino.....	56° 16'	2° 49' W.	250	29.346	29.4	48.0	32.0	43.7	35.7	8.0	40.4	38.9	36.7	2.71	0.39	0.837	538.7	SS.W.	2.9	4	0.95	4.6	David Tennant, Esq., M.B.M.S.	

At Uckfield the reading of the maximum thermometer on the 24th was altered, conjecturally, from 50° to 49°; at Hawarden the reading of the dry thermometer, at 9 A.M., on January 16th, was altered, conjecturally, from 50° to 49°; and at Dunino, the reading of the maximum thermometer was altered from 38° to 45° on the 21st. By reference to the readings of the thermometer at Jersey and Guernsey in the above Table, the ranges of readings seem to have been very different from each other.

The highest readings of the thermometers in air were 52° at Jersey, 54° at Truro, and 52° at Exeter. The lowest readings were 25° at Wakenfield, 25° at the Royal Observatory, Greenwich, and 21° at Uckfield.

The least daily ranges of temperature took place at Whitehaven, 4°·9; at Guernsey, 5°·3; and at Hawarden, 6°·3; their mean value, 5°·7, and the greatest occurred at Jersey, 18°·3, at Hartwell, 14°·8; and at Uckfield, 18°·9; and their mean value was 14°·7. Rain fell on five days at different places. The largest falls were 2·13 in., at Whitehaven, and 1·5 in. at Guernsey. The least falls took place at Truro, 0·22 in., and 0·20 in., at Cardington.

The next Table shows the average results for different parallels of latitude.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Temperature.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.
																		General Direction.	Average Strength.	Average number of days it fell.	Average fall.	
Jersey and Guernsey.....	98	49·22	29·365	0·278	53·0	36·3	16·7	49·9	39·6	10·3	44·9	43·4	41·5	0°	0·41	0·91	546·0	W.S.W. SE.	1·3	2·5	1·19	4·7
Truro and Exeter.....	98	50·31	29·909	0·249	53·4	39·1	14·3	49·7	38·7	19·0	42·9	42·9	38·3	0°	0·46	0·82	547·2	W.S.W. NW.	0·9	5	0·54	5·5
Uckfield and Hartwell.....	164	51·19	29·732	0·242	50·6	27·0	23·7	47·1	34·0	13·1	38·9	38·9	37·3	0°	0·36	0·917	546·7	W.S.W. SE.	0·7	3	0·88	5·3
Cardington and Nottingham.....	81	52·34	29·888	0·227	50·1	27·8	22·3	44·7	36·0	17·7	38·9	38·4	37·1	0°	0·33	0·892	550·9	W.S.W. SE.	0·7	3	0·87	5·7
Stonyhurst and Whitehaven.....	195	53·55	29·609	0·236	49·5	31·6	18·2	45·8	36·2	9·6	41·8	39·4	37·4	0°	0·44	0·863	543·9	W.S.W. SE.	2·2	4	1·27	7·1
Glasgow and Dunino.....	186	56·4	29·449	0·237	50·3	33·4	16·9	45·7	37·1	8·7	41·3	39·9	37·3	0°	0·49	0·859	540·1	W.S.W.	2·9	5	1·15	4·6

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

At JERSEY, the reading of the thermometer on the grass on the 23d was 29°, on the 24th 25°, and on the 25th was 28.5°. The blossom buds of the pear are shooting, of the peach and apricot quite out, and in some places the gooseberry is in full leaf. The thrush and the robin are singing as in the spring; for the last three days the weather has been superb. There has been no frost here hitherto throughout the winter, except upon the ground.

At GUERNSEY, on the 19th, the sky was almost cloudless, and there was a heavy dew; the sky on the 20th was overcast, and the night was stormy; the evening of the 21st was stormy; some hail and rain fell; the 22nd, 23rd, and 24th days were fine, with hoar frost on the 24th, and the evening of the 25th was stormy.

At TRURO, the 19th was showery and stormy; the 20th was fair in the morning, the night was wet and stormy; a heavy hail storm at about 4 p.m. on the 21st, and squalls of hail and rain at night; a hail shower early in the morning of the 22nd; hoar frost on the 23rd, showery on the 24th and 25th, the night of the 26th was stormy.

At EXETER, there was a storm of wind and rain, at 4 p.m. on the 20th, and the night was stormy; hail fell at 5 a.m. on the 21st; ice was seen on the 22nd and 23rd, and there were storms of wind and rain at night of the 25th.

At UCKFIELD, the 19th was a very fine day, the sky during the 20th was overcast, and there was a very heavy gale during the evening and night; and a great flood on the morning of the 21st; this day was mostly fine till night, when there were heavy showers of rain and hail; the 22nd was fine; hoar frost on the 23rd and 24th; the last-mentioned day was fine in the morning, and there were hail showers in the afternoon; the 25th day was overcast. During the past week the daphne mezereum, auricula anchusa, crocus, vinca minor, and berberry have come into flower, *Lonicera periclymenum* into leaf.

At ST. JOHN'S WOOD, the amount of cloud was very variable throughout the week; heavy rain fell occasionally.

At HARTWELL HOUSE, the sky during the 19th was about one-half covered by clouds; the 20th it was overcast, from noon rain was falling, and at night the wind was violent. The zodiacal light was seen by Mr. S. Horton on the evening of the 23rd and 24th, its apex reached to the place of the planet Saturn, and the observer believed he saw a pulsation within itself.

At CARDINGTON, the morning of the 19th was cloudy, the sun was shining in the afternoon; the 20th was cloudy and rough, and rain fell at night; the 21st was cloudy and fine; hoar frost was seen on the mornings of the 22nd, 23rd, and 24th, and for the most part the sun was shining, and the air was frosty; the 25th was hazy all day. Meteors were seen on the night of the 22nd. The buds of trees generally are swelling, the common hazel nut (*Corylus Avellana*) is in flower.

At NORWICH, the morning of the 20th was fine; the afternoon was overcast, and in the evening rain was falling and the wind was strong. The morning of the 21st was stormy; the afternoon was bright and clear; rain at night. Both the 22nd and 23rd were fine, and the sky on the 24th and 25th were partially cloudy. Vegetation unusually forward, the roses and early shrubs bursting into leaf.

At HIGHFIELD HOUSE, near Nottingham, the 20th day was dull, a gale from S.W. in the evening, at 10 p.m., the reading of the barometer was 29.212 in. Meteors were seen on the 21st; there were white frosts on the 22nd, 23rd and 24th. Zodiacal light was seen on the evenings of the 22nd and 23rd, with pulsations, and there was a snow shower on the 25th. On the 23rd at 10 p.m., the reading of the barometer was 30.214 in. The lowest reading of a thermometer on grass, was 23.3° on the 24th, and the highest reading of a thermometer, with its bulb placed in the full rays of the sun, was 64.5° on the 21st.

At STONTHURST, there was a cold stormy wind on the 19th; heavy rain was falling from 10 a.m. on the 20th. Aurora Borealis and lightning were seen on the 21st, and the weather during the remainder of the week was for the most part fine.

At WAKEFIELD there was a dense fog on the 24th.

Daily Falls of Rain in Inches at the different Stations.

Names of Places.	JANUARY.						
	19	20	21	22	23	24	25
Jersey.....	...	...	0.71	0.08	...	...	...
Guernsey.....	...	...	0.97	0.50	0.11	...	...
Truro.....	...	0.09	1.14	0.23	0.01	...	0.09
Exeter.....	0.02	0.47	0.02	...	...	0.04	0.30
Uckfield.....	...	1.04	0.40	...	0.02	0.02	...
Lewisham.....	0.01	...	0.53	0.13	...	...	...
Greenwich.....	...	0.14	9.31	0.01	...	...	...
St. John's Wood.....	...	0.58	...	...	0.58	0.09	...
Hartwell.....	...	...	0.57	0.01	...	...	...
Cardington.....	...	...	0.26	...	...	...	...
Norwich.....	...	0.25	0.11	...	...	...	...
Nottingham.....	0.08	0.04	0.20	...	...	0.03	0.06
Hawarden.....	...	...	0.60	0.05	...	0.05	...
Stonthurst.....	0.02	0.59	0.78	0.01	...	...	0.50
Wakefield.....	...	0.26	...	0.01	...	0.07	0.01
Whitehaven.....	0.01	1.01	0.78	...	...	...	0.33
Glasgow.....	...	0.34	0.78	0.03	0.19	...	0.02
Dunino.....	...	0.35	0.01	0.03	...	...	0.56

For the most part the gauges are read every morning at 9 a.m., and the amount fallen is that in the preceding 24 hours. At Greenwich, the gauge is read daily at 9 p.m. The largest fall was at Truro on the 21st. On this day rain was falling generally, and it is worthy of note, that at Exeter the fall should be so small, and that at Wakefield none should have fallen. At Whitehaven, the amount of rain fallen between Jan. 1 and 21, was 7.66 inches, and in the whole of January 1850, the fall was 2.99 inches.

At JERSEY, some influenza about, but the district is generally healthy.

At GUERNSEY, There is no prevailing disease.

At TRURO, No disease is prevalent in Truro. In the neighbouring rural districts there are a good many cases of continued fever.

At EXETER, No epidemic or particular disease prevailing.

At UCKFIELD, No particular epidemic prevalent.

At ST. JOHN'S WOOD, In the week ending January 18th, bronchitis and catarrhal affections are diminished since last week. Rheumatism, measles, and

scarlatina are still prevalent, the latter on the increase. And in the week ending January 25th, catarrhal and bronchitic affections, as well as rheumatism, continue prevalent. Measles on the decline; scarlatina rather on the increase. Isolated cases of pleurisy and other inflammatory affections resulting from chilled surface, as also of erysipelas (of a low type), have occurred during the week.—J. H. ROBERTS.

At BEDFORD, No prevailing epidemic during the week.—T. H. BARKER.

At NORWICH, Bronchitis, coughs, and colds are still the prevailing diseases.

At HAWARDEN, January 19th, cirrus and cirro-stratus clouds were common, and passed over with a gentle breeze from N.W. The day was fine, and the temperature, in the direct rays of the sun, was 73°. The reading of the barometer, which had increased gradually from the previous Thursday, gradually decreased during the day, the amount of fall being 0.123 in. At 11 p.m. the west was thinly overcast, and the zenith was studded with cirro-cumuli. The sign of dynamic electricity, which was 7. on Thursday, the 9th, was now 2. only. The divergence of Peltier's electrometer being scarcely perceptible. Monday 13th, was nearly overcast with cirrus, cirro-cumuli, and cirro-stratus. The wind was from S.W., and a few drops of rain fell. The reading of the barometer decreased 0.334 in., and the temperature was less than that of the previous day by 6°. The sign of electrical disturbance was 8., and Peltier's electrometer gave a sign of 3° at 11 a.m., and of 5° at 4 p.m. On Tuesday and Wednesday, the 14th and 15th, the sky was densely overcast; but on Wednesday, at noon, cirrus and cirro-cumuli were visible, between bodies of dark cloud; rain fell on each day, and the wind was 3° from S.W. The decrease of the reading of the barometer on Tuesday, was 0.235 in. The sign of electrical action was 5.; that of the electrometer 4°. The decrease in the reading of the barometer on Wednesday, was 0.403 in. The sign of active electricity, 6.; of the electrometer, 7. Thursday, the 16th, overcast; wind 2° from S.W., accompanied by drifting scud. The increase of the reading of the barometer was 0.453 in.; the increase from 3 p.m. on Wednesday to 9 a.m. on Thursday, was 0.646 in.; it gradually dropped during the day, and, at midnight, the amount of fall was 0.350 in. The sign of electric action was 8.; the electrometer was not examined. Friday, 17th, decrease of the barometer, 0.044 in., and sign of electrical disturbance, 8.; that of the electrometer, 4°. Saturday, reading of the barometer increased 0.518 in.; sign of electrification, 1.; electrometer not examined.

The following diseases have been so frequently observed to accompany atmospheric phenomena of the above nature, that I believe they may be received in the same relation to each other as cause and effect:—

Jan. 12th. Convulsions (infant), one. 13th. Diarrhea two: miscarriage, one, with profuse uterine hemorrhages; colic, with vomiting, one; colic, without vomiting, two; catarrh, one. 14th. Diarrhea, two. 15th. Hemoptysis, one; neuralgia, one; tooth-ache, one; convulsions one (infant), terminating in death on next day. 17th. Relapse of uterine hemorrhage; neuralgia, one; colds and croupy coughs common; acute rheumatism, one. I have frequently seen hemoptysis occur with low atmospheric pressure; and perhaps it may be the cause of other hemorrhages. Accidents in coal mines from suffocation, and explosions of fire-damp very often happen at the same time. The diminished pressure, caused by rarefaction of the air, which causes the fall of the mercurial column, leads to the escape of blood from the pulmonary vessels, and allows the noxious and inflammable gases to issue from the crevices and crannies of the mines.

Primroses, polyanthes, periwinkles, and crocuses are in flower.

On Sunday, 19th, cirrus and cirro-stratus clouds were very common. The sign of dynamic electricity for the previous day was 1.; and the air at 11 a.m. (19th) gave a negative sign, but at 4 p.m. it was positive, and the sign of active electricity for the day was 6. 20th. Was nearly overcast all day, and there was heavy rain. The sign of electricity in a dynamic form was 8. Peltier's electrometer giving a positive sign of 12°. 21st. Morning beautifully clear, with slight frost, and cumulus began gradually to rise in the west. This cloud, with striated zig-zagged border, from which cirro-stratus seemed to form, gradually overcast the whole sky, and at 4 p.m. there was heavy rain with sleet, and the hills were white with snow next morning. A severe thunder-storm occurred fifteen miles S. It was accompanied with very heavy rains, and intense cold. The rain continued along the S.S.E. and E. of this place, and hailstones of large size fell at Chester. Hooping-cough and measles still prevail, and two deaths have occurred during the week from the former complaint. 19th. Toothache, two cases; neuralgia, one; diarrhea, one; epilepsy, one. 20th. Influenza, two. Since 21st, there has been scarcely any illness of any kind, and the signs of electrical disturbance have diminished from 8. on 20th, to 1. on 22nd and 23rd.

At STONTHURST, colds, with sore throats, attended with shivering and headache, have occurred during the week.

At WAKEFIELD, there has been very little sickness, and no disease that can be said to have been prevalent.

At DUNINO, pulmonary affections and inflammatory diseases of throat prevail.

The weather continued similar in character to that of the preceding weeks till the 22nd, exhibiting till the time this same high temperature and excess above their averages for the season.

On the 21st the temperature was 8° in excess, on the 22nd it was about 2° in excess, and a great change of temperature took place at all places, excepting at Guernsey and Jersey; this change had set in at Glasgow and at Dunino on the 21st day. In the midland counties of England, where the greatest change took place, the temperature generally was below 32°. At Greenwich the temperature declined from 50°·9 on the 21st to 26°·6 on the 24th.

On the 19th the air was unequally distributed, the reduced reading of the barometer north of latitude 52° was 29.82 and south of it was 30.22 in.

On the 20th, the air was nearly equally distributed, its temperature at 9 a.m. at Uckfield was 37°, and at Truro it was 51°.

On the 21st, the reading of the barometer was 29.13 in. at all places, excepting at Jersey and Guernsey, where it was 29.44. At Dunino the reading of the thermometer was 36°, and it was 48°·5 at Greenwich.

On the 22nd, the air was unequally distributed, the reduced reading of the barometer north of 53° was 29.22; between latitude 51° and 53° it was 29.52; and at Guernsey and Jersey it was 29.88. At Hartwell the reading of the thermometer at 9 a.m. was 34°, and at Jersey it was 45°.

On the 23rd, the reading of the barometer was almost the same everywhere. At 9 a.m. the temperature was 30°, and at Jersey it was 48°·8.

On the 24th, the reading of the thermometer at Dunino and Glasgow was 44°, as at Jersey, whilst at all places situated between latitudes of 50° and 52°, it was at about 30°, and this band of cold continued in these parallels till the end of the week.

JAMES GLAISHER, F.R.S.,

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A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 6.

LONDON, SATURDAY, FEBRUARY 8, 1851.

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WE address you as General Practitioners—Under whatever title he may practise, it is to the interests of the General Practitioner *de facto* that this Journal is devoted.

Consider your position as General Practitioners. If, in England, you are Physicians, and practise generally, on the broad basis that medicine and surgery are one science—no matter what your acquirements and talents—you are repudiated by the College of Physicians. You can hold no honourable position in that College. As a corporate body the College of Physicians will have nothing to do with you. Few in number, but of immense influence in the higher circles of society, the privileged Physicians hold you at arm's length, and, as far as their influence extends, by word and deed convey the impression to the public mind, that you are an inferior order of practitioners, and less worthy than themselves of the public confidence. If you are Surgeons, and practise generally, that is to say, if you satisfy the requirements of the public under all circumstances, prescribing and dispensing medicines, performing surgical and obstetrical operations, meeting the exigencies of practice in every emergency, as the great bulk of the profession are compelled to do, not only in this country, but on land and water over the surface of the whole globe, then, you are repudiated by the College of Surgeons, you are deemed unworthy of any honourable distinction, you constitute an inferior order or *membership* of that College; or if, as an exceptional case, you find an entrance into the superior order or *Fellowship*, you are regarded as a mongrel amongst the fellows of purer blood. Lastly, if you are apothecaries, holding the position of general practitioners, after an adequate education and tests by examination legally performing the duties of general practice, no matter what your learning, how skilful and successful your practice, how great your reputation, you are treated still more contemptuously, and the public, as far as the influence of those who hold the highest nominal positions in the profession can extend, are taught to regard you as out of the pale of the legitimate profession; the public are stealthily advised that you are *Apothecaries*, which is but a designation for *tradesmen*; and homoeopaths, hydropathists, mesmerists, and charlatans, if they only practise physic "legitimately," which word is rendered by both these Colleges "purely," are deemed more worthy than yourselves. Notwithstanding this, the Physicians, Surgeons, and Apothecaries, practising generally throughout the land, constitute the profession at large.

As General Practitioners you have no head or home except that which you have voluntarily established for yourselves. In the communications between the Government and the Profession, the representatives of the College of Physicians are bound by their duty and by their oaths to regard you as aliens and strangers, and to adhere strictly to the interests of their ancient institution. The representatives of the College of Surgeons are bound by their duty and their oaths to maintain the interest of Surgeons, purely considered, which is literally the interest of the *Fellowship*; as members of the College of Surgeons you can have no weight whatever with the Government, because the College still sustains the fiction of representing the interest of its members, and no Government can acknowledge two parties as representing one and the same interest. Those who represent the Society of Apothecaries are bound to limit their views to medicine, in contradistinction to surgery, and to leave untouched the whole subject of the education of its members in surgery, and their practice as surgeons. As obstetricians, none of the existing institutions recognize you or represent you in the face of the Government.

Look at the existing anomalies. Look at the difficulties and intricacies which beset the Government when it attempts to deal with these anomalies. Let the question be seriously put—What is the remedy for this state of things? Upon various occasions when the Government attempted to legislate for the Profession, it naturally inferred that the College of Physicians, the College of Surgeons, and the Apothecaries' Society, constituted the Profession; but it no sooner took a step in advance, than it found itself woefully mistaken. These institutions were seen neither singly nor collectively to represent the Profession; and this is the reason that, hitherto, no Government has been able to effect any amelioration of the laws by which we are governed.

There is but one remedy for the social evils which afflict the community, and arise out of the present anomalous state of the Profession. That remedy is the establishment of a New and Independent ROYAL INSTITUTE or COLLEGE of MEDICINE, SURGERY, AND MIDWIFERY. An Institute or College which shall receive within its pale all the General Practitioners of the present day, and provide for the full and efficient General and Professional Education of those who seek to practise as such in future; which shall regulate the general Practice of Medicine; shall have power to prevent encroachments upon the duties of the Profession by the illiterate and unqualified, and to encourage and forward the cultivation of the Science of Medicine, and the collateral branches of knowledge by its members; shall provide a representative head and an official staff, which, as having been placed in their high and honourable position by the suffrages of the Profession at large, would truly represent to the Government the feelings and the opinions of the Profession, and on all occasions might be appealed to

with confidence by the Government of the day, upon subjects which concern the General Practitioner, and his relation to the public, and to public hygiene. Any government which would grapple with this subject upon a comprehensive basis, and carry it through, would effect a more lasting benefit upon the nation, than the conqueror in a hundred battles, and would deserve the gratitude of generations yet unborn.

The General Practitioners acted with forethought, discretion, public spirit, and consummate talent in organising themselves into a voluntary association; and in the whole course of their proceedings, as a combined body of so many thousand aggrieved individuals in the case of the National Association of General Practitioners. We have recently re-perused the whole of the documents issued by that body. For judgment, temper, a logical display of all the intricate points at issue and of the true bearings of each, and for a lucid development of so difficult and entangled a question as that of Medical Reform, they are master pieces. The General Practitioners have reason to be proud of the proceedings of this Association, and also of those of the National Institute. The colleges, either from a deficiency of talent or a disinclination to display the truth to the world, have proved themselves unable or unwilling to explain, either to their own alumni, or to the profession and the world at large—not only the bearings of the medical reform question—but even their own proceedings in relation to that question; they have never issued any documents that will bear the slightest comparison in point of enlightened views and comprehensiveness with those of the General Practitioners. Although the General Practitioners have not obtained their object, they have still, by their voluntary exertions, secured some considerable advantages.

The National Association convinced the Government that it is not dealing with the Profession when it deals with the existing institutions; the National Institute induced the Government to call for representatives of the General Practitioners in the joint conferences between the different classes of the Profession, and the Profession and the Government. And the justice of the cause of the General Practitioners, as set forth by the executives of these Associations, further determined the Government not to take any step in Medical Reform, without making this class in the Profession a party to the proceedings.

This ought to convince the General Practitioners how much more they might effect by union and cordial co-operation. It is a subject of regret, that a few members of the Association—comparatively a very few—dissented from their brethren. As in all such cases a few active individuals are enabled to cause a much greater appearance of dissent than really exists, and when we find, by the reports of the Journals of the day, that in a meeting of a thousand medical practitioners the dissatisfied portion numbered no more than *seventeen*, we are led to the conclusion that, as a body, the General Practitioners appreciate the immense interests at stake, and are virtually unanimous; and it is consolatory that the Association still exists—intact. We trust, when the proper time arrives, that it will resume its meetings, enlarge its boundaries, complete its organization, sink its differences, re-animate its executive, and, following up the advantages it has already obtained, that it will carry to the chambers of Downing-street the convincing argument, that a unanimous feeling pervades the Profession at large, and that it is determined upon a bold, active, unwearied, endless agitation and warfare, until it has accomplished, for the benefit of the people at large, a complete and efficient measure of Medical Reform.

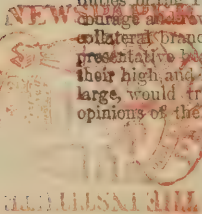
Remember, Gentlemen, that you are not merely the Profession of an aristocracy or of the court, but the Profession of the millions. It is the population at large which suffers from the existing anomalies in the Profession. We appeal to you not only as members of a liberal profession in a false position among the institutions of the country, but as men and Christians, and we call upon you to agitate for Medical Reform as a religious, as well as a social and political duty. In your capacity as General Practitioners of Medicine, the dearest interests of husbands and wives—parents and children—of whole families—rich as well as poor—are confided to you, individually. If you continue apathetic you are amenable for the continuance of the inconsistencies, and anomalies of the laws as they at present stand, and for the direful consequences which, under your own observation, are daily occurring. On the contrary, your union and co-operation in a combined movement, made with energy and perseverance, will, assuredly, at no distant period, secure their correction, and be rewarded with satisfaction and peace in the Profession, and innumerable advantages to the community.

We beg the General Practitioners to bear in mind, that the Medicine and Surgery which they practice are one and the same Science; that, as General Practitioners, they are totally unknown, unrepresented, repudiated, by the existing medical institutions, and, until a very recent period, by the Government of the country; because, educated in the principles of the Science, they practise the art founded upon it in its universal application to the alleviation and cure of diseases, and the amelioration of the mental and physical ills with which their fellow-creatures are afflicted. This preposterous anomaly—this enormous injustice—as respects, not alone its Professors, but the Science of Medicine itself, has called THE INSTITUTE into existence; and if the feelings and opinions of the promoters of this new Journal prevail, the Profession will never rest until it is corrected.

We have the honour to be, Gentlemen, your devoted Servants,

THE PROPRIETORS

AND
EDITORS OF 'THE INSTITUTE.'



ORIGINAL COMMUNICATIONS.

ON THE USES

OF THE

THYROID AND THYMIC VESSELS.

By JOHN JACKSON, Esq.

A KNOWLEDGE of the important, though as yet unrecognized fact, that the spleen, or more correctly speaking, its venous portion, is a part, the commencement or roots, of the first or hepatic afferent vessel, and which vessel receives by its extreme roots the blood from the capillary terminations of the splenic artery, and by its extreme branches the blood from the capillary terminations of the hepatic artery, and by the gastric and intestinal veins which terminate in its trunk,* the drink and digested food, as well as the blood from the stomach and bowels, and effects their slow and gentle propulsion through the hepatic capillaries and hepatic veins, or through the liver into the heart; a knowledge, I say, of this fact—the non-recognition of which is not owing to any other fact having been adduced which is opposed to it—naturally leads to the suspicion that besides the spleen, all the other so-called “vascular glands,” and amongst which are the *thyroid* and *thymus*, may be also parts of vessels, which are in some way or other subservient to the motion of blood. Now there are four ways, and only four, in which motion of blood can be influenced: firstly, it can be generated; secondly, it can be accelerated; thirdly, it can be retarded; and fourthly, it can be stopped. It follows, therefore, that if any vessel or set of vessels, of which any vascular gland, or portion of such gland, is a part, be subservient to the motion of blood, such vessel or set of vessels must either generate, or accelerate, or retard, or stop it.

In lieu of regarding the thyroid and thymus glands as organs, the structure of which is incomprehensible, let us regard the former as the capillaries between the thyroid arteries and veins, and the latter as the capillaries between the thymic arteries and veins; and instead of the questions—what is the use of the thyroid gland? and what is the use of the thymus gland? let us ask—what is the use of the thyroid vessels, arteries, capillaries, and veins? and what is the use of the thymic vessels, arteries, capillaries, and veins? and do the former generate, or accelerate, or retard, or stop motion of blood? and do the latter generate, or accelerate, or retard, or stop motion of blood?

The thyroid arteries are usually four in number, two superior and two inferior. The former are given off by the two external carotids, and the latter by the two subclavians. The four arteries then converge, and divide into branches, which subdivide into smaller ones whose ultimate ramifications are the thyroid capillaries or “gland.” From the thyroid capillaries the roots of the thyroid veins originate. These veins are generally four in number; two superior, which proceed laterally and terminate one in each internal jugular vein; and two inferior, which descend and terminate—the right, which is the largest of the two, at or a little to the left of the junction of the two subclavian veins, or top of the superior cava,—and the left in the left subclavian vein, about an inch from the right. Frequently, however, the left inferior thyroid vein joins the right, which terminates as near as may be to the junction of the two subclavian veins.

Now, do these thyroid vessels—arteries, capillaries, and veins—generate, or accelerate, or retard, or stop motion of blood? They certainly cannot generate motion, for it is evident that blood is forcibly propelled through them by the left ventricle. Neither can they retard, or stop it; but, by diverting blood highly charged with momentum from the subclavian and carotid arteries into the internal jugular veins and commencement of the superior cava, there can be no doubt that they considerably *accelerate* the motion of blood through those veins and their tributaries. Why they do so is another question.

The thymic arteries, about four in number, are given off by the internal mammary and inferior thyroid arteries. They descend and divide into branches, which subdivide into smaller ones, until they become the thymic capillaries or “gland.” From the thymic capillaries the thymic veins originate. These, which are two or three in number, ascend, and terminate at or near to the junction of the two subclavian veins, or top of the superior cava; and *opposite* therefore to the great or right inferior thyroid vein, in which a thymic vein very commonly terminates.

Now, do these thymic vessels—arteries, capillaries, and veins—generate, or accelerate, or retard, or stop motion of blood? It is clear they cannot generate it. Neither can they accelerate, or

stop it; but, by diverting two or more little counter-currents of blood into the great descending current, and one also into the current descending through the great inferior thyroid vein, they must, to a certain extent, retard both.

The thymic vessels are most developed during the period of infancy, and when the child derives more or less of its nourishment from the mother; but after infancy they are gradually absorbed, and in a few years disappear. The thyroid vessels, on the contrary, increase from the time of birth, until, with the rest of the body, they attain their full development. We may infer, therefore, that the function of the thymic vessels is, like their existence, temporary; and that of the thyroid vessels, like their existence, permanent; and moreover, that the thymic vessels and the blood which is propelled through them, counteract, during infancy, the thyroid vessels and the blood which is propelled through them: or, in other words, that during infancy the motion of blood through the superior cava and its tributaries, is not accelerated by the thyroid circulation, owing to the retarding influence of the thymic; but that, after infancy, and when the thymic vessels are absorbed, the thyroid circulation accelerates the motion of blood through the superior cava and its tributaries, and without any let or hindrance from the thymic. And a more simple or admirable contrivance than the thymic vessels for counteracting during infancy the accelerating influence of the thyroid, it would be impossible to conceive. Two of the thymic arteries are given off by the inferior thyroid arteries—the latter ascend, the former descend. A thymic vein, as already stated, generally terminates in the great or right inferior thyroid vein; the latter descends, and the former ascends. Now, why should the motion of blood through the superior cava and its tributaries be slower during infancy than afterwards? As the functional activity of organs is, *ceteris paribus*, proportionate to the rapidity of the blood's motion through their capillaries; and as all the blood from the brain, spinal cord, and organs of sense, as well as from other less noble parts, viz., the exterior of the head, the face, neck, arms, and thoracic parietes, returns to the heart by the superior cava, it follows that the thymic circulation, by retarding during infancy the accelerating influence of the thyroid, and therefore in effect retarding the motion of blood through the superior cava and its tributaries, must consequently retard its motion through the brain, spinal cord, and organs of sense, and thereby prevent an active condition of their functions. Now an active functional condition of these organs during infancy is not required, and, therefore, does not exist. On the contrary, an inactive condition of them is necessary, and the existence of which is manifested by the almost constant tendency in infants to sleep. A healthy infant a few days or weeks old, will sleep twenty-two hours out of the twenty-four; and this constant and very remarkable tendency to sleep seems to me to depend on the influence of the thymic circulation.

But after infancy an inactive condition of the brain, spinal cord, and organs of sense, is no longer desirable or necessary. The thymic vessels, therefore, are absorbed; and the thyroid becoming gradually developed, the circulation through them becomes more powerful, and the motion of blood through the superior cava and its tributaries, and also through the brain, spinal cord, and organs of sense being consequently accelerated, the functional activity of those organs is increased. After infancy, therefore, motor force is applied to the blood on the *venous* as well as on the arterial side of the capillaries of the brain, spinal cord, and organs of sense; and the contrivance by which it is effected is the thyroid vessels.

By means of the thyroid and thymic vessels, nature regulates the rapidity of the motion of blood through the superior cava and its tributaries, and consequently, through the brain, spinal cord, and organs of sense, with as much accuracy and precision as we can regulate the action of a watch by lengthening and shortening the oscillations of its balance-wheel. During infancy, she, as it were, puts the hand of the regulator towards “*slow*” by developing the thymic vessels; after infancy, she gradually shifts it towards “*fast*,” by removing the thymic vessels and developing the thyroid.

As most of the more important systemic veins in the neck, chest, abdomen, upper and lower extremities, run parallel with the axes of those parts, it is evident that rocking a child in a cradle must have the effect of retarding the motion of blood through those vessels; and its motion through the brain, spinal cord, and organs of sense being consequently retarded, a tendency to sleep is produced. When a mother rocks her child in a cradle, she retards the motion of its blood, and assists the thymic vessels to induce sleep. Thus it appears that a cradle and the thymic vessels have similar uses, for both induce sleep by retarding the motion of blood.

* The splenic vein, and its continuation, the portal.

The cells containing fluid in the thyroid and thymus glands, are probably for the simple purpose of filling up the intervascular spaces which, in true glands, are occupied by their ducts. In the spleen there are no such cells, because, owing to the large size of its veins—the roots of the first or hepatic afferent vessel—no intervascular spaces exist.

The preceding theory of the use of the thymic vessels receives staunch corroboration from the fact that, in those animals which hibernate, the thymic vessels never entirely disappear, but become developed as each period of winter-sleep approaches. There can be no doubt that during hibernation, the motion of blood is very slow—much slower than it is in the same animals during their periods of wakefulness and activity. During hibernation, the respiration is also extremely slow, and, therefore, but little oxygen is absorbed into the blood; and, consequently, the combustion of the tissues, or the process which Liebig terms "*eremacausis*," is proportionably slow. To reduce this process to its minimum, is evidently nature's object in causing those animals for which there is no winter food to hibernate; and her contrivance for making them hibernate, seems to be the very simple one of increasing the development of the thymic vessels. A similar object—that is, a slow *eremacausis*—is gained by the constant tendency in infants and the young of mammalia in general to sleep; and this tendency is, I think, fairly attributable to the retarding influence of the thymic vessels upon the motion of blood.

Mr. Simon, at page 86 of his Essay on the Thymus Gland, thus states his views concerning it:—"The function of the thymus may be stated in these words: By means of an apparatus strictly analogous to that of true glands, it secretes into a closed cavity certain particular elements of nutrition. Further, the secretion has been shown to occur differently under different circumstances—viz., (1.) In most animals it occurs only temporarily. The secreted matter then presents itself in a fluid form, and is related to the universal material of nourishment, the liquor sanguinis, by the closest affinity of ultimate chemical composition. (2.) In some animals, after discharging this temporary function, the gland gradually passes into the permanent exercise of a different but analogous act of assimilation, and manifests its secretion in the solid form of fat." From the preceding quotation it seems that Mr. Simon regards the thymus as a *secreting* organ, and as "strictly analogous" to true glands, though *they* have ducts and *it* has none; and that its function or office is to secrete from the blood which passes through it, firstly, a fluid resembling liquor sanguinis, and secondly, fat. At page 8 of his Essay, he defines the function of the thymus in these words: he says that "it presents an apparatus for the retention of nourishment in organic combination." And again, at page 89, that "the thymus gland fulfils its use as a sinking-fund of nourishment in the service of respiration." Another distinguished modern physiologist, Mr. Paget, in one of his Reports contained in the 'British and Foreign Medical Review' for April, 1846, says of the thymus gland that "it forms the more highly azotized organic compounds which it may restore to the blood for the nutrition of the fresh growing tissues." And, at the end of the same Report, he states the view of a German physiologist, Cæsterlen, "that the acts of the glands without ducts are the taking of fluid from the blood, from which as a cytotblastema their cytotlasts are formed; and that these, after their completed development, liquefy and restore to the blood a material more fitted for nutrition than that which it gave for them." To this Mr. Paget appends the following note:—"And, indefinite and incomplete as this theory is, I must confess it appears to me to express all that can as yet be considered very probable in the general physiology of the glands without ducts."

I have the highest respect for the knowledge and abilities of the physiologists whose opinions I have here quoted; but I must be permitted to observe that those opinions lack the invariable characteristics of truth, simplicity and intelligibility. A quarter of a century perhaps may elapse before the truth is recognised—I believe it generally takes about that time—but I am not more certain that during life the blood moves, than I am that every one of the so-called "vascular glands" is either entirely or partially part of a vessel or of a set of vessels, which is subservient to the motion of blood, and either generates, or accelerates, or retards it. I need hardly say that there is no vessel or set of vessels which *stops* motion of blood. The spleen, that is, its venous portion, is the roots of a vessel which *generates* motion of blood; the thyroid gland is the capillary portion of a set of vessels which *accelerates* motion of blood; and the thymus gland is the capillary portion of a set of vessels which *retards* motion of blood. These views are, I trust, intelligible; and, if they are erroneous, let my adversaries, instead of misrepresenting them and calumniating me, bring forward the facts which are opposed to them. No error can exist in the presence of an opposing truth.

CORRESPONDENCE.

CONVENTION OF POOR LAW MEDICAL OFFICERS.

To the Editor of 'The Institute.'

SIR,—I am desired by the Committee to forward to you the accompanying report of an interview with Lord John Russell, on Friday last, relative to an improved system of Poor Law Medical Relief; and to request of you the favour to publish it in the next number of the 'INSTITUTE.'

I am, Sir, your obedient servant,
HERBERT WILLIAMS,
Assistant Secretary.

4, Hanover Street,
Feb. 4th, 1851.

REPORT OF THE INTERVIEW WITH LORD JOHN RUSSELL.

ON Friday week a deputation from the Convention of the Poor Law Medical Officers had an interview with Lord John Russell, with reference to the evils of the present system of medical relief to the sick poor, at which Sir George Grey was present.

The deputation, which was accompanied by General Sir De Lacy Evans, M.P.; Jacob Bell, Esq., M.P.; Dr. Wilson, Senior Physician of St. George's Hospital; Thomas Hunt, Esq., representative of the Provincial Medical Association; James Stedman, Esq., Vice-President of the National Institute of Medicine, Surgery, and Midwifery;—consisted of Dr. Hodgkin, the Chairman of the Committee; Dr. Bainbridge, Messrs. W. Lobb, J. Liddle, E. White, W. Cantrell, of Wirksworth, Derby; Peter Martin, Reigate; E. Boulger, Bletchingly; G. Ross, J. T. Mitchell, Dr. Barnett, and Charles F. J. Lord, the Honorary Secretary.

The deputation having been introduced by the Chairman, the Honorary Secretary stated, before reading the memorial, that M. Foster, Esq. M.P., H. A. Aglionby, Esq., M.P., Thos. Wakley, Esq. M.P., J. Wyld, Esq., M.P., and several other members of Parliament, had expressed a desire to join the deputation. Delegates from the Medico-ethical Society of Liverpool, and other Associations, had also expressed a similar wish, but unexpected engagements and the shortness of the notice, rendered their absence unavoidable. It was further stated that a movement, of a similar character to that which originated this deputation, was becoming active in Ireland, and that a large meeting had just been held on the subject in Belfast.

The memorial set forth the evils of the present system, and showed that the three thousand poor law medical officers, who administered relief to nearly three millions of the suffering poor in England and Wales, were so inefficiently paid, that the cost of drugs alone was, in many cases, barely met by the salary. The average rate of payment for each case of sickness, as ascertained from 805 returns from Officers of Unions, is 1s. 6½d. for metropolitan districts, and 2s. 7d. for country districts; whereas the cost of drugs, for dispensary cases, amounts to 2s. 1½d., and for hospital cases, 4s. 4½d. It further stated, that the burthens which have been imposed on union surgeons, through the regulations of the General Board of Health, under orders from the Poor Law Board and Guardians, while no provision existed to secure extra payment for these important services, were of a distinct character from those imposed on them by their contracts with the Board of Guardians. In illustration of the evils of the present system, special allusion was made to the case of "Hyet v. the Cheltenham Board of Guardians," in which Mr. Justice Patteson, in his address to the jury, stated that, "the medical officers of unions were the hardest worked, and worst paid class of officers in the kingdom." The memorial concluded by suggesting, for the amendment of the system, the following principles:—1st. Permanence of office during competency and good conduct. 2nd. Remuneration proportioned to the extent and nature of duties. 3rd. Responsibility to professional authority under medical inspectors; and praying his lordship to introduce a Bill into Parliament embodying these provisions.

Mr. Boulger, of Bletchingly, represented, "That the uncertain tenure of office appeared to be greatly detrimental to the due discharge of the duties of the medical officers of the poor law districts. That medical officers were often prevented from acting conscientiously towards their patients, through fear of incurring the displeasure of their employers, the guardians. That the medical profession was not more venal than any other body of men, and that if the appointment of a medical officer was made to endure *quandiu se bene gesserit*, such an arrangement would redound no less to the benefit of the poor, than to the honour and advantage of the medical profession. Mr. Boulger mentioned, that in his own neighbourhood a medical officer

had been removed without cause, and without a moment's notice by the guardians, who elected a person in his stead, whom they subsequently deemed inefficient. The guardians in a few months stultified themselves by re-electing their former medical officer. Such circumstances and changes must be fraught not only with discomfort, but with actual injury to the poor."

In reply to a question by Sir George Grey, Mr. Boulger apprehended that the decision as to the competency or incompetency of a medical officer would rest with the proposed medical inspectors.

Mr. Cantrell, of Wirksworth, Derbyshire, stated that he represented the opinions of a great number of medical officers in Derbyshire, and had had much experience of poor law medical practice, having been a parish surgeon before the passing of the present law, after which he acted as guardian for two years, and had ever since been a medical officer of an extensive poor-law district; that he considered the remuneration was both unequal and inadequate, and suggested that the mode of payment should be based on the population, extent, and poverty of the districts, which could be easily ascertained. He objected to a payment per case, as it would act injuriously to the poor, as disease would become fixed and death often occur, before an order would be obtained, if it involved an extra fee; to show which, he stated that since he had become medical officer he had never received more than six orders to attend labourers, because it involved an extra fee. He also referred to the advantage of having medical inspectors.

Sir George Grey asked the deputation with whom they intended that the power of electing and appointing the medical officer should rest? Lord John Russell also desired to know whether it was proposed that the entire expense of medical relief should be discharged through the consolidated fund?

The Honorary Secretary stated, in reply to both these questions, that, as half of the expense was already paid by the Government, it was deemed desirable that the entire cost should be derived from the same source; it had been suggested, however, that the cost of drugs should be met by the poor rates. It was proposed that the guardians should still have the power of nominating their medical officers, but that the Government should appoint the medical inspectors.

Mr. Liddle stated that he had had sixteen years' experience of the working of that part of the poor-law which related to medical relief, and he could confidently affirm that it required great alteration and amendment. He would, however, only direct his lordship's attention to the necessity which existed for appointing medical inspectors. At present the medical officers of unions were under the entire management and control of the Boards of Guardians, to whom they had to make weekly reports, but which reports were seldom, if ever, looked at by the guardians, or if they were, the guardians could not understand them; they were, therefore, useless; but if such reports were submitted to a medical inspector, much benefit would accrue, not only to the medical profession, but to the public at large, as the medical inspector would be able to make most valuable statistical returns, which would materially tend to the advancement of science, and the physical improvement of the people. The labour which was now imposed upon medical officers, in compelling them to keep useless books, was extremely onerous and burdensome. Secondly, it often happened that sanitary duties, and very properly so, were imposed upon the medical officers; but under the existing arrangement, it was impossible they could conscientiously do their duty to the public if they were very desirous of keeping their appointments, for it frequently happened that much property in poor neighbourhoods belonged to individual members of the Board of Guardians, and which was in such a bad sanitary condition that it was positively injurious to the health of the neighbourhood; but the medical officer dared not report it to the Board, for fear of losing his appointment. Thirdly, disputes often arose between the medical officer and the patient, which of course were referred to the Board of Guardians, but the guardians were altogether unable to come to a satisfactory decision upon the subject in dispute, not understanding the nature of the case. The matter was then sometimes referred to the Poor Law Board, who (from there not being a medical man in that department) were just as incompetent to form a correct judgment of the matter in dispute. For these and other reasons which might be adduced, if time permitted, Mr. Liddle pressed upon the attention of Lord John Russell the advantage to be derived from assimilating the civil service in the department of medical poor law to that of the army and navy.

Mr. Hunt, of Bedford-square, said that he had the honour to represent the Provincial Medical and Surgical Association, consisting of about 1200 members of the profession, residing in various counties of England and Wales. This Association was accus-

tomed to meet annually in large numbers. Many of the members were poor law medical officers, and the subject of the medical administration of the poor law had frequently been discussed, and after careful consideration, the Association had petitioned Parliament on the subject. In this large body of practitioners, Mr. Hunt believed there was unanimity of opinion on the subject of the memorial now presented to his Lordship, in the petition of which they cordially concurred. They especially felt the necessity of medical inspection, and the injustice of non-medical guardians deciding upon questions of medical competency and services.

Mr. Stedman, of Guildford, stated that in his capacity of Vice-President of the National Institute of Medicine, Surgery, and Midwifery, he was constantly in the habit of hearing from the numerous members of the Institute and National Association, that one of the great grievances of the profession, was the unsatisfactory way in which the medical officers of Unions held their appointments, and the very insufficient remuneration they received from the Boards of Guardians. That a medical inspector would prove acceptable to the profession, as a medium for regulating the payments to the medical officer, and as a general referee to whom all medical questions might be referred. He also directed the attention of his lordship to the difference of the amount paid for medical attendance on prisoners, and on the poor.

Sir George Grey was under the impression, that the medical officers of prisons devoted their whole time to the prisoners.

Mr. Stedman stated, that the surgeon to the Guildford House of Correction received a salary of more than double the sum given to the surgeon of the Union House, the inmates of the prison being numerically fewer, and that the gentlemen holding those appointments were both engaged in general practice.

Jacob Bell, Esq., M.P., stated, that having been many years a guardian, he could testify to the defects of the present system, one of which was the very inadequate remuneration afforded to the medical officers; another was the absence of medical authority in regulating their duties, and supervising the whole administration of medical relief to the poor. He entirely concurred with the principles of the memorial, and was anxious to further its objects.

Dr. J. Arthur Wilson said, that although unexpectedly called on, he should have great satisfaction in supporting the memorial of the medical officers of Unions. He was pained and surprised that nearly three thousand gentlemen of education, the physicians of the poor, for they were called on to conduct the most important cases, both in medicine and surgery, should be subjected to such treatment as was described in the memorial. He had observed, in a periodical of last week, two cases which struck him as shocking in a country like ours. At Bury, an inquest had been held on a poor man aged seventy-one, who had fractured his thigh, and who died in consequence of bed-sores, the guardians having obstinately refused to supply for his use, as requested by the medical officers, either a water-bed, or one of Hooper's water-cushions. At the inquest the guardians attempted to transfer the blame to the medical officer, by alleging that the sufferer died from improper medical treatment; the jury, however, by their verdict, fixed the blame of neglect and cruelty on the Board of Guardians, who ought to have supplied every appliance considered necessary by competent medical authority. After mentioning an analogous case at Southampton, Dr. Wilson went on to say, that such examples, which were unfortunately too common, proved the absolute necessity of an intermediate authority, which should possess the requisite professional knowledge to direct guardians in doubtful points respecting medical matters. Dr. Wilson in strong terms expressed his sense of the injury done to society by the occurrence of such incidents as those above related, and said that he believed the mind of the medical profession in London was aroused to the evils of the present system, and to the stigma cast upon it by the treatment to which so large a section of the profession was subjected. As Physician of an Hospital, he knew the poor, and he knew that, in sickness especially, it was unwise and ungenerous to afford them medical aid in a way which might not be agreeable to their sympathies, rendered keen under pain and affliction. After what he had heard to-day, he should advise medical pupils, of whom he had seen successive generations, to avoid contact with Boards of Guardians. They should be always ready to afford aid to the sufferer, whoever might apply; but if they valued their comfort and respectability, they must be careful how they accepted medical appointments under the Poor Law.

Sir De Lacy Evans said, that as he was with one exception a non-professional person, he might be excused for offering a few observations to his lordship. He felt the importance of a question which involved proper medical attendance upon 3,000,000 of the poor in the hour of sickness. He first, however, wished to correct

an omission in the memorial, which stated that the Poor Law Board had only in two cases ordered a reduction of salary to the medical officer contrary and in direct opposition to the votes of the guardians: he alluded to the case of St. Martin-in-the-Fields Westminster, as another similar instance in which the Poor Law Board had, against repeated applications and unanimous votes of the guardians, enforced a reduction of the salary of the medical officer of the workhouse. Perhaps it might be arising from his military education, but it appeared to him a great anomaly that there should not be some reference to medical authority in this civil service (which concerned 3,000 medical gentlemen) as there was in the army and navy. It struck him also as remarkable, that there should be so great a contrast between the payments made to the medical officers of prisons and those who attended the poor. It appeared that in many instances the payment to medical officers of prisons was five, six, and seven times greater than that given to poor law medical officers.

Sir George Grey observed, that those appointments were made by magistrates, and that the whole of the time of the officer was given to those duties. This was immediately met by several of the deputation asserting that these officers practised generally, as well as attended the prisons.

Mr. White stated that he was a medical officer of one of the Unions alluded to, in which the Poor Law Board had recommended a lower remuneration for services than that submitted for their confirmation by the guardians. In his Union there were three medical officers; their cases averaged 9,000 annually, for which they received 465*l.* per annum, or about one shilling per case; the guardians, after refusing any remuneration for attending cases of cholera in 1849, determined on adding another medical officer, although no complaint was alleged against the old ones, thus taking off one-third of their salaries, and the four now received 65*l.* a year less than had been paid to the three. In making these remarks he wished to do justice to a large portion of the Board of Guardians, as these changes were effected by small majorities of one and two only, and a protest was entered on the minutes by the Chairman and a large number of the Board against this injustice to the medical officers. The medical officers obtained an interview with the Poor Law Board, who, upon further consideration, recommended an increased allowance, *but still less than that first suggested by the guardians.*

Lord John Russell having courteously and attentively listened to the facts and suggestions set forth in the memorial, and to the remarks of the deputation in support of them, stated that he had had much communication with the late President of the Poor Law Board, Mr. Charles Buller, and lately with Mr. Baines, on this subject; that the question was surrounded with difficulties, financial and otherwise: he would, however, speedily communicate with Mr. Baines with reference thereto.

The Hon. Secretary, in thanking the Premier for the lengthened audience his lordship had given to the deputation, trusted that his lordship would not allow them to depart without an assurance that the subject should meet with remedial legislation. He presumed to press this the more, as a mass of evidence in favour of such redress was collected by the Parliamentary Committee in 1844; and also, as the question had been constantly agitated by the Convention for more than three years, and furthermore, as they had been on former occasions assured by Government and the Poor Law Board, that it should be speedily considered in relation to an amended law on the subject.

His lordship again promised that he would specially communicate with the President of the Poor Law Board with reference to the objects sought by the deputation.

The deputation then withdrew.

THE PHILOSOPHICAL GAZETTE.

ON ALOIN: THE CATHARTIC PRINCIPLE OF THE ALOES.

BY MESSRS. T. AND H. SMITH,
Chemists, Edinburgh.

DURING last summer, having occasion to prepare a quantity of the aqueous extract of aloes—a preparation in repute with many medical men—we made use of cold rather than hot water as the solvent, from an impression that a more perfect, though less bulky result would be obtained, by leaving in the marc a large proportion of resinous matter, which must necessarily be contained in the extract prepared from a hot solution. Further, with the view of rendering the preparation as perfect as possible, the filtered liquid was evaporated *in vacuo*,—thereby avoiding an excess of heat, under the influence of which and exposure to the air,

recent researches show the cathartic property of the aloes is seriously impaired.

After the syrupy liquid had cooled, certain appearances arrested our attention, and seemed of sufficient importance to induce a departure from the original intention of forming it into a dry extract. The vessel containing the thin extract was now, therefore, set aside for a few days; and when again examined, the contents were found to have lost their original liquid state, and to have become loaded with a mass of granular crystalline matter. The whole was at once put into a cloth, and freed from the liquid portion by strong pressure. The crude solid substance left in the cloth being very impure, required further treatment before an opinion as to its nature could be formed, and was therefore dissolved in hot water, and filtered while still hot, out of contact with the air. On the cooling of the liquid, the substance separated in a crystalline state, and of a deep yellow colour. After a second pressure, it was subjected to another treatment exactly like the last. The solid cake resulting from the third pressure, after being completely dried, presented the appearance of an opaque straw-yellow mass, breaking short and of a dull fracture. Its taste was intensely bitter and distinctly aloetic, but entirely without smell. It was found to be quite combustible, and to leave no ash on being burned on platinum foil. Its solution acted on test paper neither as an acid nor an alkali; it was, therefore, a neutral body. It dissolved in very small quantity in cold water—not above a grain to the ounce—but very readily when heated. It is very soluble in acetic ether, and also in acetic acid, of about 25 per cent., even in the cold; four grains may be easily dissolved in a fluid drachm of either of these liquids. In lime water it is considerably more soluble than it is in cold distilled water. Oil of turpentine and chloroform do not appear to have any solvent action on it. It is very readily dissolved by aqua potassæ, and other alkaline liquids. In rectified spirit, with the assistance of heat, it dissolves in large quantity; and on very slowly cooling, out of contact with the air, it crystallises in beautiful yellow satiny tufts of rhombic plates. The spirituous solution, however, refuses to give crystals unless above forty grains to the fluid ounce of spirit be used. It is, therefore, very soluble in this menstruum—twelve parts by measure being capable of holding one part in solution. Weak spirit is also a good solvent; for on adding water to a strong alcoholic tincture, there is no separation. Sulphuric ether dissolves it very sparingly.

From a consideration of all these characters, we became satisfied that the substance which had been separated by us from the commercial Barbadoes aloes had never been made known before, and, therefore, was a new substance; but whether the interest attached to it should terminate here remained to be seen. Of course, the first and most important question which suggested itself to the mind, and which remained to be solved, was—Whether the crystalline substance, which we had now convinced ourselves was an educt, and not a product, from the aloes, had any of the virtues of aloes as a medicine, or whether the virtues of aloes were concentrated in it, and depended on its presence for their action on the living body.

The first trial, with the view of ascertaining its action on the body, was made with half a grain, and it acted twelve hours after being taken, in the manner that so characteristically distinguishes the action of aloes. The same quantity was again given to two healthy young men, with a similar result, except that in one about twenty-four hours elapsed before its operation. In the next two cases, one grain failed to act; but in one of these, the dose having been increased to two grains, a very strong operation was the consequence. In a case where four grains were given, the person, a patient of Dr. Robertson, Physician to the Edinburgh Royal Infirmary, had been getting one quarter-grain doses of elaterium with little effect. The operation in this case was rather violent. In numerous other cases in which it was tried, it invariably operated in doses of from one to two grains. The result of these trials was the removal from our minds of every doubt of the crystalline body yielded by the aloes being that on which its cathartic action depended, being, in fact, the active principle of the drug.

To the new crystalline substance we have given the name of aloin. It was obtained, as already stated, from Barbadoes aloes; and it became a question, both interesting and important, to ascertain whether it could be procured from other kinds, such as the Socotrine and Cape. With this view, we, therefore, put these two kinds of aloes under treatment, operating in the very same way as with the Barbadoes, but without success. That the aloin is present in both of these sorts there cannot be a doubt.*

* Since writing the above, a vessel containing a solution from the Cape aloes, and which had been put aside and remained undisturbed for a long

In fact, we have no hesitation in stating our belief, that we shall yet obtain it from these, the result of what little we have done convincing us of its existence in them as well as in the Barbadoes sort, but by the presence of impurities, chiefly, we suspect, of a resinous nature, the aloin is probably so entangled that it cannot get freedom for that arrangement which seems necessary for ready crystallisation. That a crystalline body may be present, and yet may not crystallise, will, we believe, be readily admitted by any one much occupied with the process of crystallisation. Another cause may perhaps be found in changes and decomposition, originating in faulty processes of preparation, the result of ignorance, carelessness, or fraud. That faulty methods of preparing the aloes may be one cause of certain kinds of the drug not giving aloin, is rendered probable by the following circumstance, which came under our observation. If aloin be crystallised, either from water or rectified spirit, and the crystals left in contact with the mother liquid, in the course of a few weeks, but more quickly in the latter than in the former case, the crystals will have then entirely disappeared, thus showing the readiness with which the aloin loses its crystallisable character. Keeping these considerations in view, and taking advantage of what little we now knew of the properties of the aloin, the following steps were taken:—

The watery solution of Cape aloes having been mixed with a very little sulphuric acid, to separate a quantity of colouring matter, along with a fatty acid and chlorophyll, was filtered and then evaporated in vacuo to a thin extract. The extract was shaken with a quantity of ether, which was then poured off, and allowed to evaporate very slowly. Aloin at length crystallised; but, of course, from its slight solubility in ether, the quantity was very small; but the thick liquid which had been washed with the ether, after standing undisturbed for a week or two, was found to have yielded a crystalline crop of aloin considerably more abundant.

The nature of the process by which the presence of aloin in the Socotrine aloes was tested by us was somewhat different from the preceding. A strong alcoholic tincture of the aloes having been prepared, sulphuric ether was added as long as any precipitate was produced. A dark coloured compound of lime being thus taken out of the way, the ethero-spirituous solution, after becoming quite clear, was mixed with a small quantity of water. The result was a separation of the mixed liquids into two distinct portions: the one heavier, composed of most of the water and spirit and a little ether, forming the under portion; and the lighter, consisting principally of ether, but containing a little spirit and water, floating above it. The heavy liquid, having been separated, was exposed to a heat of about 130° Fahr. till the spirit and ether had completely evaporated. The watery solution now left on cooling gave crystals having the characteristic appearance of aloin, and a trial strengthened this belief of their nature. The lighter liquid, on slow evaporation, likewise produced similar crystals.

The solutions of aloin are wonderfully altered by the action of the air. One striking experiment made by us will perhaps place this character of aloin in as strong a light as any that could be stated. Two grains of aloin having been dissolved in two ounces of distilled water, the solution, which was of a very pale yellow colour, was corked up in a phial that was nearly filled with it, and then set aside in a heat of about 120° Fahr. The colour of the solution gradually passed into a fine red, deepening continually in intensity, till in a few weeks the colour had become so deep as almost entirely to obstruct the passage of light.

It may not, also, be without some interest to mention here, the singularly striking effect of nitric acid upon the aloin. Half a drachm of strong commercial nitric acid being put into a test tube, and fifteen grains of aloin gradually added, great heat and violent action are produced, with the escape of red fumes, and a perfect solution is the result. The syrupy liquid being now added to cold water, a yellow precipitate is formed, which, however, dissolves on adding more water; and, on neutralising the liquid with aqua potassæ, a liquid of a splendid red colour is produced. The intensity of the colour is so great that, on comparing it with a liquid of equal bulk, and containing the colouring matter of two ounces of cochineal, that coloured by the aloin is of a deeper red, and even in the richness of its shade rivals the other. When the liquid is slowly evaporated, tufts of long needle-shaped crystals of chrysammate of potash are produced.

For an account of the chemical characters of aloin, we beg to refer to an article by our friend, Dr. Stenhouse, in the 'London,

Edinburgh, and Dublin Philosophical Magazine' for December last, from a consideration of which it will be quite obvious, that the substance we have obtained from the aloes is quite different from that described by Mr. Edmund Robiquet.—*Monthly Journal*, February, 1851.

URIC ACID IN THE BLOOD IN HEALTH AND DISEASE.

DR. GARROD has made the interesting discovery that uric acid exists in the blood in minute quantities in health, and more abundantly in gouty subjects, in the form of urate of soda. The process by which the presence of uric acid was detected, is as follows:—1,000 grs. of the serum were evaporated to dryness in thin layers in the water-bath. The residue was powdered and treated with rectified spirit, boiled for about 10 or 15 minutes, again treated in the same way, and the spirituous solutions preserved for examination. After again washing with spirit, the dried serum was exhausted with boiling water, the operation being repeated two or three times, and the watery solutions mixed. On evaporating a small quantity of this liquid with the addition of nitric acid, and holding the residue over the vapour of ammonia, distinct evidence of the existence of uric acid was afforded by the production of the beautiful tint of murexide. The aqueous solution was then evaporated until it became slightly thick, and when cool was acidulated with muriatic acid. On standing for some hours, crystals of uric acid were deposited; these were collected, washed with alcohol, and weighed. When the above process was followed without the addition of the acid, the concentrated aqueous solution was found to deposit crystals of urate of soda in the form of tufts of needles.

In four cases of gout, the quantity of uric acid in 1,000 grs. of serum was found to be as follows:—

I.	II.	III.	IV.
0.050 gr.	0.025 gr.	0.045 gr.	0.030 gr.

The author arrives at the following conclusions regarding the relation of uric acid to gout:—

1. The blood in gout contains uric acid in the form of urate of soda, which, as has been shown, can be obtained from it in a crystalline state.

2. The uric acid is diminished in the urine immediately before the gouty paroxysm. This was shown by the examination of the urine of the patient from whom the blood (IV.) had been removed. For several days, at the commencement of the gouty attack, no uric acid could be detected in it, although on the third day a trace could be discovered by the murexide test, and a few crystals were deposited, whilst the blood during this time gave abundant evidence of its presence. When the attack had subsided, the uric acid was present in the urine in its normal quantity.

In the urine of the patient (II.) when the attack was passing off, the uric acid amounted to 0.050 gr. only; hence not more than one-twelfth of the natural quantity. The same fact was proved to occur in other cases.

3. In patients subject to chronic gout with tophaceous deposits the uric acid is always present in the blood and deficient in the urine, both absolutely and relatively to the other organic matters; and the chalk-like deposits appear to depend on an action in and around the joints, &c., vicarious of the "uric-acid-excreting" function of the kidneys.

4. The blood in gout sometimes yields a small portion of urea (no albumen being present in the urine), as shown by the crystallization with nitric acid.

The quantity of uric acid in the blood of healthy persons, or at least those suffering from slight headache or other trifling affections, was found to amount per 1,000 grs. of serum, in one case to 0.007 gr., in another to a trace only; in two patients suffering from slight paralysis and an ill-conditioned habit of body, to 0.010 gr. No trace could be found in the blood of the sheep nor in that of the pigeon; the urine of the former contains no uric acid, whilst that of the latter consists entirely of urate of ammonia.

In several examinations of perfectly healthy blood, uric acid was invariably present.

It appears, from these experiments, that in health (or tolerable health) uric acid can be detected in the blood of the human subject. It appears also, that when the function of excretion is very perfectly performed, no trace can be detected, although, as in the case with birds, the amount of uric acid formed in the system is very large.

In rheumatism, the blood contains no more uric acid than in health; and no urea can be detected in 1,000 grs. of serum.

In cases of albuminuria, uric acid is always present in the blood, the quantity however varying. When the functions of the

period, has been examined, and found to contain a mass of crystalline matter, exactly of the same appearance as that first obtained from similar solutions of the Barbadoes aloes, which, we feel satisfied, will turn out to be aloin.

kidneys are much impaired, it exists in quantities almost as great as in gout; in other cases its amount is small, but it usually exceeds that found in ordinary blood. Urea always exists in large quantities in this blood, as is well known, and no relation is found between the amounts of urea and uric acid. In the examination of the blood in albuminuria, some of the colouring matter of the urine seemed to be thrown down with the uric acid in all cases. Dr. Garrod considers the quantities of uric acid found by him in the blood in his earlier experiments as rather below the true amounts. He recommends that the crystals should not be collected until forty-eight hours have elapsed; and he further suggests whether, in doubtful cases, it might not be possible to determine as to the presence of gout or rheumatism from an examination of the blood.

REVIEWS.

Medicines, their Uses and Mode of Administration: including a complete Conspectus of the three British Pharmacopœias, an account of all the new remedies, and an Appendix of Formulæ. By J. MOORE NELIGAN, M.D., Edin., M.R.I.A. Third Edition. October, 1850, Fannin & Co., Dublin.

This is one of the best works of the class extant. The first edition was published in 1844, and a feeling at that time prevailed that a compilation of the kind, in face of so many excellent Dispensatories and Treatises on *Materia Medica*, with which the literature of the profession abounded, was scarcely to be considered worthy the time and attention of a learned physician. We have been in the habit of employing the former edition as a work of reference for several years, and we have no hesitation in declaring that it is one of the most complete, and at the same time the most condensed work we have met with—and that its distinguishing attribute is its accuracy. The title, given above, sufficiently describes its contents, but the book itself, being a collection of all the principal facts belonging to the department of medical science of which it treats, scarcely requires or admits of a critical analysis.

The work is peculiarly well adapted for lying on the practitioner's library table for daily reference. It contains a copious index, extending to upwards of fifty columns, including all the new substances and the new preparations employed in the treatment of diseases. On referring from the index to any article, the botanical, physical, or chemical properties, the therapeutical effects, the doses and administration, are so succinctly and at the same time so correctly given, as to ensure to the practitioner a reminiscence of all that is essential without any unnecessary expenditure of time; and while we protest against any reliance upon works of this class for a knowledge of the nature or treatment of diseases, we believe that it will be generally conceded that, for the purposes we have indicated, they are not only highly useful, but absolutely necessary for every individual in the successful conduct of his practice.

The "Appendix of Formulæ" is also a remarkably judicious and useful document. The forms are arranged under the following heads:—*Antacids, Anthelmintics, Antispasmodics, Astringents, Cathartics, Caustics, Diaphoretics, Diuretics, Emetics, Emmenagogues, Emollients, Epispastics, Expectorants, Narcotics, Refrigerants, Sedatives or Contra-Stimulants, General Stimulants, Special Stimulants, Tonics*. The experienced practitioner will at once observe the practical bearing of this classification, and we can assure him that some most excellent forms of combination are inserted under each head. We cannot terminate this notice more usefully than by the insertion of a few examples, taken promiscuously:—

An excellent Mixture in Hysterics, &c.

R Zinci Valerianatis, gr. viii.

Tinct: Valerianæ, ʒij.

Aquæ Flor: Aurantii, ʒiiss.

Syrupi Hemidesmi, ʒij; fiat mistura, cujus capiat semiunciam sextis horis.

The Hemidesmicus Indicus is described at page 213.

An excellent Injection in the advanced stages of Gonorrhœa, in Gleet, and in Leucorrhœa.

R Tinct: Acetatis Zinci, ʒij.

Infusi Matico, ʒviiss.

Mucil: Gummi Tragacanth: ʒij; M. Fiat injectio, frequenter utenda.

A useful Cathartic in Gouty and Rheumatic Habits.

R Vini Sem: Colechici, ʒss.

Tinct: Rhœi et Aloes, ʒi.

Spiritus Myristicæ, ʒss.

Infusi Rhœi, ʒvi. M. Fiat mistura de qua sumantur cochlearia ampla ij, tertius vel quartis horis ad effectum.

In Amenorrhœa, with torpor of the circulation.

R Tinctura Ergotæ, f. ʒ iss.

Syrupi Croci, ʒij.

Decoct: Aloes Composit: ʒvi. M. Ft. mistura, cujus capiat cochlearia ampla ij, sextis horis.

Emollient. In the troublesome Cough of Phthisis and of Chronic Bronchitis.

R Decocti Althææ, f. ʒvj.

— Glycyrrhizæ, ʒi.

Tinct: Opii Camphoratæ, f. ʒij.

Syrupi Hemidesmi: f. ʒi. M. Fiat mistura, capiat cochlearia amplum tertii, urgente.

An excellent form of administering Copaiva.

R Copaivæ, f. ʒiij.

Sol: Alkali: (Brandish) f. ʒ iss.: Tere benè simul in mortario vitro, dein adde inter tendum.

Olei Limonum, f. ʒ ss.

Syrupi Simplicis, f. ʒiij. Fiat mistura, capiat cochleare minimum, ter in die ex cyatho aqua.

The book contains upwards of two hundred of these formulæ. This third edition is an improvement upon the two former, and contains the most recently suggested remedies, even to Dr. G. O. Rees's employment of lemon juice in the cure of acute rheumatism.

MR. HIGHLEY, Bookseller to the Royal College of Surgeons, has recently published a very clever little book of formulæ for Skin Diseases, entitled, *Pharmacopœia Nosocomii in curam Cutaneorum Morborum*.

It will be found to contain a variety of ingenious and well-digested prescriptions for baths, ointments, lotions, pills, powders, mixtures, &c., for combating these obstinate and capricious affections. Much skill and judgment have been displayed in the selection of the various approved modern remedies. What practical man has not occasionally been put to his wits' ends, and had to ransack his brains over and over again for some new remedy or plan of treatment for these troublesome diseases? It is a very small volume, but we are sure it will be a valuable addition—we will not say to the library, but to the waistcoat pocket, of every man engaged in the arduous duties of general practice, who, too often overwhelmed with cases of vital importance, has but little time to search octavo volumes, for anything he may chance to have read or heard of in the way of remedies for these minor affections.

MEDICAL INTELLIGENCE.

MEDICAL SOCIETY OF LONDON.

January 25th, 1851.

DR. BENNETT, President, in the Chair.

REMOVAL OF THE CUBOID BONE, TOGETHER WITH THE TWO OUTER METATARSAL BONES AND TOES.

Mr. Coulson related the following case of excision of the cuboid and the two outer metatarsal bones. A. F., aged 22, always enjoyed good health till last March, when he had an attack of pleurisy, which lasted a week or twelve days. In the middle of May, after considerable exertion, he first observed a swelling on the outside of the right foot, which soon became red and painful. This was treated in the usual way (by poultices and fomentations), but still it increased in size. In July the swelling was freely opened and a good deal of cheesy matter removed. The wound, however, continued to discharge, and it was soon discovered that the bone corresponding with the opening was diseased. He was then very properly advised to have an operation performed, either for the removal of part or the whole of the foot. He (Mr. Coulson) saw the patient on the 17th of October last, when he found a sore of the size of a shilling on the right foot, corresponding to the cuboid bone, from which there was a good deal of sanio-purulent discharge. On introducing a probe through the wound the bone could be felt distinctly carious. The foot was generally swollen, but there was free motion of the ankle joint. For some time past the pain on attempting to put the foot to the ground had been excessive, and at night as soon as he became warm he was distressed with violent pulling pains, which prevented him

from having any sleep for weeks together. The discharge of matter from the middle of July to the time Mr. C. saw him had been very great; latterly it had been thick, and sometimes tinged with blood. He seemed very much worn by his sufferings, and was looking pale, thin, and exhausted. As far as Mr. C. could learn, there was no hereditary complaint in the family of any kind, and the patient had never required medical advice till March last. It was a matter of uncertainty to what extent the bones of the tarsus were affected, especially as the pain and swelling were so great; but the greater probability being that the cuboid only was affected, Mr. C. determined at first to remove that bone, and, if the disease had extended beyond, to perform Chopart's operation, or remove the foot at the ankle joint. An incision was carried from a little beyond the wound posteriorly, along the outer part of the dorsum, to the extremity, and round the two outer toes; the skin was dissected upwards and downwards, so as to expose the cuboid and the two metatarsal bones. The knife was then carried along the inner side of the metatarsal bones, little or no skin, except at the extremities of the toes, being taken away. The bones were disarticulated from the cuboid, and this bone easily detached from the os calcis by means of a gouge. The disease was found to be confined to the cuboid only, the os calcis and other bones, as far as could be ascertained, not being affected. The disease was situated in the cancellous structure, the cells having been enlarged principally through the breaking down of their walls; for the bony *debris* were discoverable amongst the other contents of the cells. The lining membrane was intensely red, and the inflammatory action had extended from the centre towards the articular surfaces, which, however, were healthy. The contents of the enlarged cells were principally thick, well-formed pus. The healing of the wound proceeded very favourably, and at the end of December, the patient left town. In a letter, on the 16th of this month, he says that his foot is fast gaining strength, so that, with a little assistance from two sticks, he can walk very nicely. Simple as this operation is, Mr. Coulson could find few cases of it on record. In Averill's 'Operative Surgery,' 2nd edition, p. 184, a case is recorded, in which Mr. Key removed this bone, together with the cuneiform and two or three metatarsal bones, on account of an injury to the foot, Mr. Key's object being to save the great toe. The operation was completely successful. At the meeting of the British Association for the Advancement of Science, held at Dublin, in 1835, Mr. Whetton, of Manchester, advocated the longitudinal operation, and showed a patient from whom he had removed the three outer toes and external cuneiform together with the cuboid, who could walk without even a halt. Professor Syme, to whom Mr. C. expressed his obligation for this information, considers the chief objection to all such operations as these the risk of relapse, and is inclined to think the ankle-joint amputation a more efficient mode of affording relief, with few exceptions, when the disease affects the tarsus. Mr. Coulson hoped that the case he had related would prove successful, as the disease had existed so short a time, and had made so little progress.

PRESERVATION OF MORBID SPECIMENS IN ARSENIURETTED GAS.

Mr. B. W. Richardson, of Mortlake, presented to the society a specimen of the aortic valves and the surrounding parts; not, however, for the purpose of exhibiting anything peculiar in pathology, but to show a new method that he had employed in this instance, for preserving dead structure. Mr. Richardson remarked that during the last summer he had been much annoyed at having failed in preserving with its distinguishing features, by means of spirit, a fine specimen of ulcerated larynx; he therefore determined to try whether some colourless gas would not answer as an antiseptic better than spirit; and remembering the preservative qualities of arsenic, he fixed upon arsenetted hydrogen gas as most likely to prove successful. The specimen presented to the society had been preserved in this manner: it was put into the bottle filled with the gas in October last, and although putrefaction had already slightly commenced it had gone no further, nor was there the slightest change in the appearance of the specimen. Should the method of preserving pathological structures by means of colourless antiseptic gases, succeed, its advantages over any other plan would be numerous; the cheapness of the process was one important consideration; there was no distortion in looking at the specimen, and lastly there was perfect retention of colour; it was well known that preparations kept in spirit soon became white, and also that many parts, which were very soft could not be preserved in spirit to any advantage, neither could many important lesions, such as ulcerated surfaces, be preserved with their characters for any length of time; but if colourless

gases, on more extended trial, were found effectually antiseptic, the most delicate forms of altered structure might be kept for an indefinite period, with all their distinguishing features unchanged.

The mode of using an antiseptic gas was very simple. The preparation was first put into a bottle, which was then filled with water (or mercury), and inverted on the shelf of a pneumatic trough. The beak of a retort, from which the gas was passing, being placed under the neck of a bottle, the gas was allowed to displace the fluid contents of the vessel in the usual mode, a nicely-fitting cork was put into the bottle, and lastly the cork and neck were sealed, by being dipped into melted wax.

Mr. Richardson concluded by remarking, that he had shown the preparation to an excellent chemist, who agreed with him as to the antiseptic power of the arsenetted gas; but feared that if it were employed extensively, it might, by escaping, prove highly dangerous. To this objection, however, he could not himself subscribe, as he believed it quite possible to close the mouth of the bottle so effectually, that any escape of gas would be rendered impossible.

Mr. T. H. Wakley exhibited a case of instruments for THE TREATMENT OF PERMANENT STRICTURE OF THE URETHRA.

He remarked that the treatment of stricture of the urethra had been much discussed within the last year or two, and had given rise to a great deal of controversy. It certainly was not a settled question what should be done in cases of severe permanent stricture. Mr. Syme, of Edinburgh, had recommended the division of such strictures by perineal section, where the ordinary means of treatment had failed. Probably the instruments, which he then had the honour of bringing before the notice of the society, would, in some cases at least, render such an operation unnecessary. He had used them on several occasions already with very satisfactory results. The instruments were manufactured by Messrs. Weiss, and were very well made. They consisted of—

1. A catheter, thirteen inches in length, of a very small size, slightly curved at the extremity, the stem quite straight, and having at the end a worm for the reception of the screw of the directing rod.
2. A small thumb-slide, screwing closely upon, and acting as a handle to the catheter (removable at pleasure.)
3. A short steel rod. It passes into the catheter as far as the worm, at which part both are united by two or three turns of the rod. It makes an addition of five inches to the length of the catheter. The rod and catheter combined, form the index-rod or director for the metallic and elastic tubes.
4. Of the silver straight tubes there are nine, of graduated sizes: the first is only one size larger than the index-rod, and they regularly increase in circumference; the last, or No. 9, corresponding with that number of the ordinary bougie. These tubes are all of a conical shape at their distal extremities, and are so constructed as to fit the mouth of each tube with extreme exactness to the surface of the index-rod. They thus slide with the most perfect ease along that guide, and being directed by it, if that instrument be in the proper situation, the tubes cannot take a wrong course, or make a false passage, but must pass through the stricture.

5. There are also three *elastic tubes*, composed of a flexible metal, covered with an elastic gum-fabric. This combination gives to the instrument very considerable strength, without rendering it clumsy or bulky. The extremity of each of these flexible tubes has the same form as that of the silver tubes, and fits with extreme nicety the surface of the index-rod.

Supposing, then, that a patient, having stricture of the urethra, is before the surgeon for operation—the mode of proceeding is as follows:—

First, introduce the catheter as gently and with as much care as possible, completely through the contracted part to the bladder. Having done this, withdraw the stilette, and the surgeon having satisfied himself, by the escape of urine, that the instrument is in the bladder, insert the smaller extremity of the steel rod into the catheter, and having secured it by making two or three turns of the screw, remove the thumb-slide, and then pass No. 3 silver tube upon the index-rod through the stricture or strictures. In performing the operation, the passage of the instrument will be much facilitated by giving to the flanges a rotatory motion as they are held between the fingers and thumb. This tube being withdrawn, the others may all be passed in a similar manner and in regular succession. The number to be introduced must of course be determined by the operator.

After the last metallic tube has been withdrawn, an important object is still to be secured—that of *keeping the command of a free*

urethra. How is that to be done? This certainly is a point of considerable importance. Mr. Wakley stated that it might be accomplished with the greatest ease by passing one of the *elastic tubes* over the index-rod into the bladder, *the index-rod then to be withdrawn through it*; this may be done with the most perfect ease and facility. *The flexible tube* may be left in the bladder to serve the purpose of a catheter, and also to afford a safe channel or guide for the re-introduction of the silver catheter or index-rod.

The society would not fail to perceive that the action of these instruments was safe and simple. The application of the knife for the relief of stricture had been much condemned, and he thought that in many cases the instruments he exhibited would be sufficient to effect a cure. Time and experience in the trials of both plans would be required to enable a decision to be formed as to their merits, and it was possible that in some instances the section would succeed where the tubes would fail, and the reverse.

Mr. Syme states that he had endeavoured to establish two positions. "First, that the division of a stricture by external incision upon a grooved director, passed fairly through the contracted part, is an operation free from all ordinary sources of danger. Secondly, that by this procedure, strictures which resist every other mode of treatment, and are apt to resent seriously even the gentlest use of simple bougies, may be speedily removed, so as to allow instruments of the largest size to be introduced without difficulty or inconvenience." The first proposition demanded particular attention, because he thought that the plan of treatment by tubular expansion would in many cases of stricture render the perineal section unnecessary. If the grooved director could be "passed fairly through the contracted part," of course the small-sized catheter or index-rod now shown could also be guided through the stricture into the bladder, and the passage being thus secured, the tubes, both metallic and flexible, might be made to take the same course, without the slightest danger of making a false passage. In some very obstinate and inveterate strictures he had succeeded in affording relief almost without difficulty. His colleague, Mr. Gay, who was present, could acquaint the society with the result of this treatment on one of his patients. In that instance the man had been treated in the ordinary way, but without success. It was suggested that it was a case which would effectually test the efficiency of the new treatment. The rod and tubes were introduced in the presence of Mr. Guthrie and several other gentlemen. After Mr. Gay had very cleverly, but not without some difficulty, introduced a No. 2 catheter, the metallic tubes from No. 3 to No. 9 were passed without a check. No. 8 elastic tube was then slipped over the directing catheter, and the latter instrument withdrawn, leaving the tube in the bladder.

Mr. Wakley believed, that in the hands of others the effects produced by the instrument would prove as satisfactory as they had been to himself. At the hospital with which he was connected, the opportunities for proving their utility were very frequent, and it would afford him pleasure to show any practitioner who might honour that institution with a visit, the manner in which they were employed. The instruments had been seen by Sir B. Brodie, Mr. Guthrie, Mr. Stanley, Mr. Fergusson, and other distinguished surgeons, who all appeared to approve of the principles of treatment which their use involved. In placing them before the society and the profession, he felt confident that they would receive a fair and candid trial. On a future occasion, he should take an opportunity of offering to the notice of the society the results of the new mode of treatment.

(To be continued.)

EPIDEMIOLOGICAL SOCIETY.

February 3, 1851.

Dr. BABINGTON, President, in the Chair.

Dr. William Stokes, of Dublin, was elected an honorary fellow of the society. Seven ordinary members, and eight corresponding members were also elected, and certificates in favour of several candidates for membership were read.

The meeting was made special for an alteration in the fourth section of the ninth chapter of the bye laws, by which it was proposed to empower the Council, when appointing Committees for the investigation of matters of great importance, to select as members of such Committees, gentlemen well acquainted with the subject, and capable of rendering great services, although they be not members of the society. The alteration was carried unanimously.

THE ORIGIN AND PROGRESS OF CHOLERA AND SMALL POX IN GUERNSEY.

Dr. Gull then read a paper by Dr. Hoskins, F.R.S., on the origin and progress of cholera and small pox in Guernsey.

The author commenced by stating that the ravages of cholera, in 1832 and 1849, as well as those of small-pox and other epidemics, at various periods, in Guernsey, are strictly referrible to impure localities. After mentioning what he considered to be the pathognomonic symptoms of cholera, and giving a table of their relative frequency, he proceeded to state that, in July, 1832, when cholera was prevalent throughout Europe, a questionable case occurred in St. Peter Port, and ended fatally; but not being immediately followed by others, the alarm soon ceased. In the ensuing October, however, there were several unequivocal cases in the north-eastern suburb called the Boriét, all of which proved fatal; and immediately afterwards, in a circumscribed spot, about a mile to the southward of that place, near the harbour, there occurred a large number of cases, whence the disease did not spread for three days. This attack continued nearly a week, and then disappeared. The mortality during that time was about 100 out of a population of 14,000. The rapid disappearance of the disease is attributed by the author to the isolation of cases, as they occurred, in a well-regulated cholera hospital, and to the vigour with which sanitary measures were carried out, except as regarded an intermitting mill-stream in the neighbourhood, which, in spite of the remonstrances of the medical staff, still remains to engender disease.

Early in June, 1849, a small vessel brought the remains of the master from Rotterdam, where he had died of the epidemic. The leaden coffin had burst on the voyage. It was landed on the outskirts, and at once buried, a numerous procession following, and a circuitous route being taken through thickly populated districts. The wearing apparel and bed linen of the dead, were washed and dried, without any precaution, in a house with ten or twelve inhabitants; only one of the females thus engaged was taken ill. The nature of her complaint the author could not learn. She recovered. The crew of the vessel all landed in apparent good health, and, taking their clothes, went to their homes. On the 10th, one of them, after supping on mackerel, cucumber, and cyder, was seized with cholera, and died in a few hours. His cottage was full of inmates, but no one in the neighbourhood was attacked. This was the first authentic case of cholera in the island, and caused great consternation; several cases of diarrhoea were during the next week reported as cholera, from the vicinity of St. Sampson's harbour, four or five miles distant, but, on investigation, were found not to present any of the real characters of the disease. No fresh cases occurred until the beginning of August, when the epidemic broke out in the town hospital, which served the purposes of a hospital, poor-house, house of correction, and refuge for destitute children. To prevent the increase of the disease, the inmates were removed to different parts of the island, and only one case occurred among them afterwards. After this, the cholera broke out with great violence in the same parts of the town as in 1832, pursuing a rapid and fatal course, principally along the banks of the mill-stream already mentioned. It also broke out again in the Boriét, and extended along the sea shore, while in the neighbourhood of St. Sampson's harbour, the mortality exceeded that of the worst part of Lambeth. In September the cleansing and fumigating of infected dwellings, together with the purification, as far as possible, of the mill-stream, were carried out, after which the disease began to abate, and disappeared altogether by the end of the month.

The author next proceeded to speak of the topography of the districts where the disease was most violent. The hospital was found to be very defective in its drainage; in one part there was a cesspool, which discharged its surplus into a tank of spring water, used for culinary processes; another cesspool was detected, with an obliterated drain, the very existence of which had not been suspected, while an untrapped gully-hole opened close to the place occupied by the first victim of the disease. In the suburb of the Charroterie there is a large pond, supplied by several streamlets, which, when full of water, is comparatively innocuous, but being seldom in that state, and receiving besides the drainage of the surrounding houses and manufactories, during the summer months it yields a permanent supply of the noxious gases, generated by animal putrefaction and vegetable fermentation. From this pond arises the mill-stream already spoken of, which, though occasionally flushed, passes chiefly as a ditch, pursuing its course between and beneath houses, to which it serves as a common open sewer, and pouring out its foul contents into the harbour, where other drains also empty themselves, leaving a putrefying mass to give forth noxious gases during the twelve hours of each day that the tide

is out. The houses around the harbour are all densely occupied. The author next speaks of the Boriét, which, he says, is amply supplied with all the elements of disease, from porous cesspools, foul pigsties, damaged gratings, and dilapidated drains. At St. Sampson's harbour, two miles northward of St. Peter's, there are eleven houses, consisting of two rooms each, without door or window at the back, and in these there are located upwards of one hundred English quarymen, lightermen, and other labourers, with their families. Here cholera was very prevalent. A wall several feet high, formed, with the houses and the quays, a kind of yard, containing heaps of solid filth, and an open pond called a cesspool, the receptacle of the filth from all the houses. The soil being loose, the liquid contents of the pond percolated through it to an adjoining well, whence the inhabitants obtained the water for all purposes. Upon this state of things Dr. Hoskins observed, had the demon of pestilence in person superintended the arrangements, he could not have contrived more effectual means for the propagation of disease. The mortality here exceeded that of the more crowded and filthy localities in London by upwards of 33 per cent.

With regard to the question of contagion, the author stated that two men, employed as masons in the Charroterie, were seized with cholera in an isolated, clean, and well-ventilated cottage at St. Pierre du Bois, about five miles distant. One of the rubbers and two other persons in the cottage were next attacked, but the disease did not spread further. In other instances some of the rubbers and nurses at the hospital have been similarly affected.

Small-pox preceded and accompanied the epidemic cholera, and after its cessation, continued and spread ultimately into the country parishes.

Vaccination was introduced into Guernsey about the commencement of the present century, and no cases of small-pox occurred afterwards until 1825, when two persons suffering from it were landed from a troop-ship, and soon infected the population generally, but principally in a modified form. Vaccination was freely practised, and every measure adopted to expel the disease, which was ultimately effected. It occasionally recurred, and each

attack was clearly traced to contagion. It was imported into Alderney in the spring of 1849, and thence, no precautions being taken against it, into Guernsey. It soon spread; and when the cholera also broke out, the virulence of the small-pox seemed greatly increased, especially in the choleraic districts. The lower orders had an extreme repugnance to vaccination. This was with difficulty overcome in many instances, still greater obstinacy being encountered in the country parishes, where the exanthema was very fatal. It ultimately wore itself out. According to Dr. Maunsell, from March, 1849, to March, 1850, there occurred upwards of 2,000 cases of small-pox in St. Pierre le Rade, out of a population of 15,000, three-fourths of which were persons who had never been vaccinated, while the remainder may be supposed to have been imperfectly protected, vaccination being practised by nurses and midwives, who are unacquainted with the true characters of the vaccine pock.

With reference to the question of contagion in cholera, the author draws the following conclusion. "In the first place, the disease did not spread from any of the *foci* established in the country districts before mentioned:—2ndly. No case can be referred to the presence of the clothes and bed-linen landed from the cutter:—3rdly. No outbreak followed the transit of the corpse, either along its line of route, or among the attendants at the funeral:—4th. Several weeks elapsed before any further manifestation of the complaint took place. It then broke out at considerable distances, without any suspicion of inter-communication, in districts favourable to the development of zymotic action. The case of the sailor from Rotterdam, those in the cottage of St. Pierre du Bois, and one in the cholera hospital, however, favour the opinion as to the contagious nature of the disease.

The paper concluded with some remarks on the *modus operandi* of the poison productive of cholera.

(To be continued.)

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

(Extracted from the 'Paper of Transactions,' dated July, 1845.)

Continued from page 47.

Howlett, H., 10, Cambridge terrace, Edgeware road
Hoyland, C. W., 23, York place, Portman square
Hubert, W., Ramsey, Isle of Man
Huddleston, J. N., 16, Cornwall place, Holloway
Hudson, F., 24, Alexander square, Brompton
Hudson, W. T., 61, South Audley street
Hudson, D., Little Thorpe, Leicester
Hudson, G., Oldham
Hudson, J., Huddersfield
Hughes, R., Stafford, Surgeon to the Infirmary
Hughes, W., 90, High Holborn
Hugo, S., Crediton, Devon
Hulke, W., Deal, Kent
Hull, G., Deptford lane
Hulme, H., Dauby street, Liverpool
Humpage, E., Bristol
Humpage, J., Hounslow
Humphreys, T., Penrhyn Hospital, Bethesda, Bangor
Humphreys, T. B., 27, Great Tower street
Humphreys, W. E., 21, Upper Southwick street
Humphries, E. L., 4, Courtney terrace, Kingsland
Humby, E., Aberdeen place, Maida hill
Humpage, J., 1, Bryanstone street
Hunt, T., Herne Bay, Kent
Hunt, W., Warrington, Lancashire
Hunt, F. K., Croome's hill, Greenwich
Hunt, F. B., Farningham, Kent
Hunt, R., Farrington, near Lynn
Hunt, J., Billericay, Essex

Hunt, J. T., Chaddesley Corbett, Kidderminster
Hunt, R. T., Manchester, Consulting Surgeon to the Manchester Lying-in Hospital, Surgeon to the Manchester Eye Hospital, and Lecturer on the Eye at the Manchester Royal School of Medicine and Surgery
Hunt, S., Chagford, Devon
Hunter, T., Budleigh, Salterton, Devon
Hunter, T.
Hunter, G. Y., Margate
Hunter, J., 11, Hart street, Bloomsbury
Hunter, J., 1, Compton terrace, Islington
Hunter, J., Jun., 10, Milner square, Islington
Hunter, J., Church row, Islington
Hunter, J., 83, Great Tower street, City
Hunter, J. C., 30, Wilton place, Belgrave square
Huntley, G. H., North Shields
Hurd, James, Shaftesbury, Dorset
Hurleston, C., Chichester
Hurman, H. P., Curry Rivel, Somerset
Hurst, J., Bedford
Hurst, C., Midhurst, Sussex
Hurst, H. R., Pulborough, Petworth, Sussex
Hutchins, W., Keynshaw, Somerset
Hutchins, H., 19, Trinity square
Hutchinson, J., 105, Milton street, Dorset square
Hutchinson, J., 184, Blackfriars road
Hutchinson, F., 92, Farringdon street
Hutchinson, R., Nottingham
Hutchinson, J., Little Waltham, near Chelmsford

Hutchinson, R. E., Masham, Yorks
Hutchinson, Richard, Great George street, Liverpool
Huxtable, W., Mare street, Hackney
Hyde, A. J., Westbury on Trim
Hyde, W., Bloxham, Oxon
Hyne, C. W., Bedford
Ibeson, Robert, Barnsley, Yorkshire
Iliff, William, Canterbury row, Newington
Iliff, William T., Jun., Canterbury row, Newington
Illingworth, A., Fowey, Cornwall
Illingworth, Henry, Bradford, Yorkshire
Illingworth, J. A., Bradford, Yorkshire, Consulting Surgeon to the Bradford Infirmary
Ilott, T., Bromley
Ilott, J. W., Bromley
Ince, J., 3, Lower Grosvenor place
Ingoldby, F., Finsbury square
Ingham, Thomas, North Shields
Ingram, C., Corfe Castle, Dorset
Ingram, W., Midhurst, Sussex
Ingram, E., Boston
Ings, J., Henley-in-Arden, Warwick
Inman —, Liverpool
Inman, W. B., Norton street, Liverpool
Innes, T. S., Myrtle cottage, Caerleon, Monmouth
Inverarity, R., Baldock, Herts
Ireland, J., King's Winford, Dudley, Worcester
Irwin, W. C., Leicester
Irwin, William Bell, Long Benington, Lincoln
Irwin, W. C., 133, Goswell street

Isbell, Edward J., Ross, Hereford
Ivers, D. C., Ballyshannon, Ireland

Jackman, John Hawkes, Temple Cloud, near Bristol
Jackson, J., 30, Church street, Spitalfields
Jackson, G., 30, Church street, Spitalfields
Jackson, C., Barrow-upon-Humber
Jackson, T.
Jackson, E., Chaderley Corbett, Kidderminster
Jackson, T., Welton, near Hull
Jackson, J. H., Darlington
Jackson, F. G., Barnsley, Yorkshire
Jackson, T., Willingham, Lincoln
Jacob, J., 3, Goswell road
Jacob, P. W., Rochester
Jacobs, W. H., Bristol
Jacobs, H., Thornfalcon, Taunton, Somerset
Jacobs, W. H., Clarence road, Bristol
Jago, F. R., Hammersmith
Jacombe, T., Plymouth
Jacomb, T., Cheltenham
James, D., Capel, Dorking, Surrey
James, W. A., Longden, Pontesbury, Salop
James, J., Madley Market, Salop
James, H. G., Clifton
James, P. W., Merthyr Tydvil
James, R., Grampound, Cornwall
James, W., 37, Euston square
James, H., 4, City road, Finsbury square
James, W., 42, Norfolk street, Strand
James, R., Notting hill
Jarvis, G. H. T., 7, Kingsland green
Jarvis, J., 13, Hart street, Bloomsbury
Jay, Edward, 51, Park street
Jay, Henry, 42, Sloane street
Jeaffreson, J., 9, Barnsbury place, Upper street, Islington
Jeaffreson, J. F., 11, Canonbury square, Islington
Jeames, J. W., Grantham, Lincoln
Jeffery, J. D., Sidmouth
Jeffress, Richard, Wisbeach, Cambridge
Jeffreys, Alexander, Queen sq., Liverpool
Jeffree, J., 54, Paradise street, Lambeth
Jeffs, R., 1, Finsbury square
Jenings, H., West Drayton
Jenkins, J., Gosport
Jenkins, C., Bristol
Jenkins, H. J., Madley Market, Salop
Jenkins, C. F., Bath, one of the Medical Officers of the Bath Union
Jenkins, —, Bridgnorth
Jennette, Matthew, Birkenhead
Jenner, W., 14, Albany st., Regent's park
Jenner, W. H., 2, St. Anne's lane, City
Jennings, J. E., Coleford, Gloucester
Jepson, E. C., Durham
Jervis, T., 23, Edward st., Portman sq.
Jesse, J., Manchester
Jessop, A., Castleford, Pontefract
Jeston, T. W., Henley-on-Thames
Jeston, A. F. W., Malmesbury, Wilts
Jewel, D. M., Penryn, Cornwall
Joberns, W. S., Hyde, Isle of Wight
Johnson, W., Colchester
Johnson, W., Watlington, Norfolk
Johnson, H., Midhurst, Sussex
Johnson, B. K., Ealing
Johnson, George, Pettybury, Cambridge
Johnson, W.
Johnson, W. E., Dudley, Worcester
Johnson, F. G., 21, Saville row
Johnson, G. C., 1, Grosvenor street, west
Johnstone, J., Great George square, Liverpool
Jolley, J. T. F., Torquay
Jolley, W. A., Torquay
Jolliffe, G. H., Crewkerne, Somerset

Jolliffe, G. S., Crewkerne, Somerset
Jolliffe, J., Chard, Somerset
Jollitt, J., St. Hillier's, Jersey
Jones, George Turner, North Dispensary, Liverpool
Jones, W., Weston-super-Mare
Jones, T., Malmesbury, Wilts
Jones, E. J., Gravesend, Surgeon to the Dispensary
Jones, E., Ross, Hereford
Jones, J. T., Stroud, Gloucester
Jones, Charles, Alton, Hants
Jones, A. O., Epsom
Jones, R., Brackley, Northampton
Jones, R. H., Conway
Jones, A. N., Bideford
Jones, E., Lower Edmonton
Jones, W., Sutton, Cambridge
Jones, W., Henley-in-Arden, Warwick
Jones, S., Farthingstone, Northampton
Jones, J., Ilfracombe
Jones, F., Ventnor, Isle of Wight
Jones, J., Gnosall
Jones, A. O.
Jones, G. M., St. Hillier's, Jersey
Jones, W., Cleobury Mortimer, Salop
Jones, H. F., Malmesbury, Wilts
Jones, H. D., 23, Soho square
Jones, J., 70, Judd street, Brunswick square
Jones, C., 5, Cavendish square
Jones, J., Buccleugh terrace, Clapton
Jones, J. T., Strand
Jordan, W. P., 9, Lower Belgrave street
Jordison, R. B., South Ockendon, Romford, Essex
Joseph, E., 15, Great Marylebone street
Jotham, E., 50, Great Suffolk street, Borough
Joy, H. W., Staplehurst, Kent
Joy, W., Northwold, Norfolk
Jukes, Thomas, Tisbury, Wilts
Julliett, H. B., Ventnor, Isle of Wight
Justice, C., Cullompton, Devon

Kay, J., 70, Old street, St. Luke's
Keal, J., 24, Woburn place
Keal, W. T., Oakham, Rutland
Keasley, J., Nottingham
Keats, H. M., Sloane square
Keddell, J. T., Sheerness, Kent
Keeble, H., Greenwich
Keele, J. R., Southampton
Keele, C. S., Southampton
Keele, C. P.
Keen, T., 15, Manor place, North, Chelsea
Keightley, R. D., Batley, West York
Kell, L. P., 8, Bridge street, Westminster
Kelly, F., 60, Fetter lane
Kellet, R., Leyland, Lancashire
Kelly, P., Earl street, St. Paul's square
Kelly, W. M., Taunton, Somerset
Kelly, J., Market Deeping, Lincolnshire
Kelson, J. J., Bristol
Kemp, B., Wakefield
Kemp, W. W., Oulton
Kemsey, T. F., Stamford
Kendall, W., Budleigh, Salterton, Devon
Kendall, T. M., Stanford-le-Hope, Rumford
Kendell, W., Collington
Kendrick, —, Manchester street, Manchester square
Kennard, R., West Malling, Kent
Kennedy, A., Broadway, Stratford
Kenworthy, James, Surgeon to the Manchester and Salford Lying-in Hospital
Kenworthy, John, Manchester
Kent, W., Walsham-le-Willows, Ixworth, Suffolk
Kent, J. C., Wrotham, Kent
Ker, Henry W., Store street, Manchester

Kerr, F. W., Carlisle
Kersey, K. C., Littlebourne, Wingham, Kent
Kesteven, W. B., 1, Manor road, Upper Holloway
Kettle, H., 16, Calthorpe street
Kettlewell, T., Pudsey, near Leeds, Yorkshire
Key, W. D., 32, Brudenell place, New North road
Kidgell, S. W., Pangbourne, Berks
Kidyell, G., Wellington
Kift, Arthur, Chatham
Kilnar, J., Bury St. Edmund's
Kilvert, J., Bath
Kimbell, J. H., Knowle, Warwick
Kimmel, W. Tanworth, Henley-in-Arden, Warwick
Kimbell, J., Knowle, Warwick
Kimpton, J. W., Studhampton, Oxon
King, G., Haxted, Suffolk
King, T. H., Camelford, Cornwall
King, R., St. Hillier's, Jersey
King, Thomas, Chelmsford, Essex
King, A., Bridgewater
King, G., Bath
King, H. F., Blandford, Dorset
King, Jonas, Tunbridge Wells
King, J., Shaw street, Liverpool
King, Alfred, 4, Gray's inn lane
King, J., 10, Portland terrace, Regent's park
King, T. K., 32, Addington place, Camberwell road
King, W., 4, Albion terrace, Whitehorse lane, Stepney
King, W. G., 7, Thurlow place, Hackney road
Kingdon, E. H., Exeter
Kinglake, Hamilton, Taunton, Somerset
Kinnier, J., Dorset crescent, City road
Kirby, B.
Kirkman, J. T., Horndean, Hants
Kirkland, T., Ashby-de-la-Zouch
Kisch, J., 2, Circus place, Finsbury square
Kitching, G., 19, Tysoe street, Clerkenwell
Knaggs, J., 1, Mornington crescent
Knevet, C., 20, Lower Phillimore place, Kensington
Knight, T., Brill, Bucks
Knott, J., Blisworth, Northampton
Knowles, E. T., Farnham
Knowles, E., Cambridge

Labron, E., Pavement, York
Lacey, E., Poole, Dorset
Lacy, J. P., Newark-upon-Trent
Laing, J.
Laking, T., 12, Marlborough road, Chelsea
Lamb, W. B.
Lamb, Thomas M., Middleham
Lambden, A., Coningsby
Lambden, J., Great Grimsby
Lambe, W., 1, Bolingbroke row, Walworth road
Lambert, H. W., 28A, Devonshire street, Portland place
Lambert, J. W., 57, Berner's street, Oxford street
Lambert, G. H., 105, Albany st., Regent's park
Lambert, H., St. Luke's Hospital
Lambert, G., 69, Lissos Grove, North
Lambert, —, Farsley, Bradford, Yorkshire
La Mert, S., 9, Bedford st., Bedford sq.
Lammiman, R. W., 188, Cock hill, Ratcliffe
Lamotte, A. J., Tiverton, Devon
Lampard, J., Warminster, Wilts
Lancaster, J., Clifton

(To be continued.)

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, February 8,	at 8 P.M.
MEDICAL & CHIRURGICAL,	Tuesday, do.	11, at 8½ P.M.
ZOOLOGICAL,	do.	11, at 9 P.M.
MICROSCOPICAL,	Wednesday, do.	12, at 7 P.M.
[The Anniversary Meeting.]		
PHARMACEUTICAL,	Wednesday, do.	12, at 9 P.M.
KING'S COLLEGE (Medical),	Thursday, do.	13, at 7½ P.M.
[On Gout. By Samuel B. Partridge, Esq.]		
ROYAL,	do.	13, at 8½ P.M.
ROYAL INSTITUTION,	Friday, do.	14, at 8½ P.M.
MEDICAL,	Saturday, do.	15, at 8 P.M.

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THE INSTITUTE.

LONDON, SATURDAY, FEBRUARY 8, 1851.

WE have been favoured by the executive of THE NATIONAL INSTITUTE with a copy of certain Resolutions recently adopted by the Royal College of Surgeons of Edinburgh, on the subject of Medical Reform. The College declares itself in favour of a New Incorporation of the General Practitioners in England—but that our readers may have our own comments in juxtaposition with these resolutions, we here insert them:—

Copy of Resolutions adopted unanimously by the Royal College of Surgeons of Edinburgh, on the 3rd February, 1851.

RESOLVED—

That the College deeply regret the failure of a general measure of Medical Reform, proposed by a Conference representing all the great medical interests of the United Kingdom; approved of in its leading principles by the Lord Advocate, Chairman of a Committee of the House of Commons on Medical Law Amendment; and certain of having received the support of the Government, if it had been brought into the House of Commons with the concurrence of the delegates of the conferring bodies.

That the College, having been long familiar with the successful working in Scotland of a system under which the qualifications of the General Practitioners of the country have been conferred by the existing great Medical Incorporations there, regret that a similar advantage should not have been bestowed upon England under the auspices of the Royal Colleges of Physicians and Surgeons in that division of the kingdom.

That, from the experience which the last few years have afforded, and, more especially, from the decision of the Council of the Royal College of Surgeons of England, on the plans proposed by the Conference Committee, the College is fully persuaded that there is no reasonable prospect, at the present time, of any improved system of medical polity being adopted and carried into effect by means of the existing English Medical Incorporations; and that, therefore, the great object must either be abandoned as impracticable, or sought by means of other mechanism, called into existence by the Legislature for that important purpose.

That the College have seen a Bill, brought into Parliament by Mr. Wyld, which is framed upon this principle; and which is calculated to abolish injurious exclusive privileges; to open the practice of all the branches of the profession in England to all educated and qualified medical men, wherever their education and their legal qualifications may have been obtained, and to establish a principle of reciprocity of privilege between the medical men of England, Scotland, and Ireland.

That without at present entering into the consideration of the details of the said Bill, some of which may require to be amended in order to secure its efficiency for the purposes contemplated by its projectors, the College do now resolve, for the reasons above assigned, to give their support to its principle, and to authorise their Medical Reform Committee, in the event of its clauses being adjusted to their satisfaction, to petition Parliament in its favour in the name of the College, and to give their best assistance to the promoters in perfecting it, and carrying it into legislative effect during the ensuing session of Parliament.

Thus the General Practitioners of England may now calculate upon the cordial co-operation of the Royal College of Surgeons of Scotland, and of the large class of General Practitioners in the Sister Kingdom which that College represents; but they must bear in mind the conditions upon which that support is given.

The condition, on the one part, is a principle of reciprocity of privilege between the medical men of England, Scotland, and Ireland; on the other part, a high standard of qualification, tested by full and efficient examinations. On both parts—a penal enactment, which shall effectually prevent the practice of medicine by unqualified, uneducated, and illegal pretenders.

The legally qualified General Practitioners in England have—not unnaturally—for many years past, been jealous of the inroads made upon their privileges by Scotch and Irish Practitioners, whose education they believed to be inferior to their own, who had no legal right to practice in England, but who, notwithstanding the illegality of the act, settled themselves down as Practitioners in every city, town, and village, upon an equal footing—as far as the public could judge—with those who had complied with the law. Every possible effort has been made to stem this apparent aggression, but without effect. With many Practitioners "*Medical Reform*" was merely a figure of speech, by which they expressed their desire to prevent the inroads of Scotch and Irish Practitioners. But this kind of *quasi* Medical Reform has fallen a dead letter, owing to its manifest injustice and impolicy, and the increasing intelligence and liberality of all parties. No law could now be enacted which would perpetuate old or create new local distinctions; and those who called out for Medical Reform upon such a narrow basis as this, have fallen back into the ranks of the apathetic and the inert—that class, unfortunately too numerous, who by their exclusive devotion to their own interests, and indifference to the well-being of their profession, are at this moment exercising so injurious an influence over the destinies of that profession.

Mark the effects of this attempted unjust exclusion of the members of the Scotch and Irish Corporations from practising medicine in England. It has contributed, to a very great extent, to foil the whole profession in their efforts to obtain an efficient penal enactment. It has also contributed to prevent a proper elevation of the standard of qualification for the General Practitioner. The penal enactment called for by the English Practitioners has hitherto met with the opposi-

tion of the Scotch and Irish, because their own liberties have been either directly or indirectly invaded by it. The opposition of the Irish and Scotch Corporations to a new College of General Practitioners, with such provisions as would secure a high standard of qualification for the profession at large—or their lukewarm support of such a College—has been justified by the absence of a satisfactory security that their own rights, as Institutions of the United Kingdom, would be secured.

The principle of reciprocity, fully carried out, at once puts an end to all injustice, and obviates the jealousies and difficulties arising out of it. Once admit this principle, and the profession is unanimous in its demand for a penal enactment. Once admit this principle, and the authorities in every part of the United Kingdom can no longer have any interest in opposing each other as to the standard of qualification, but would have a common interest in raising that standard to the highest point which is consistent with the public requirements. Thus a penal enactment against unqualified practitioners, and a high standard of qualification for those who in future are to be admitted into the ranks of the profession, are among the results to be expected from a just system of reciprocity.

It is satisfactory to find that the College of Surgeons in Edinburgh, and the National Institute in London, understand each other upon this vital point. We know not what course the College of Physicians in Scotland will take upon this occasion. It is to be hoped that they will not complicate the simple question, as it now stands—a General Practitioner question and a General Practitioner Bill, affecting the Practitioners of the whole United Kingdom—with the wider question of a general Medical Reform affecting the ancient Institutions of London in particular. It is now quite clear to all parties that no general measure of Medical Reform can even be attempted until the question affecting the General Practitioners shall have been satisfactorily settled; and it is to be hoped that those who represent the interests of general practice, and have the control of the education of the General Practitioners, will remain united, and will cordially and consistently co-operate until this object is accomplished. The first step in Medical Reform is the establishment of the General Practitioner, whether under the title of Physician or Surgeon, in his just rights and proper position; this effected, all the rest will readily follow.

In the above Resolutions the College of Surgeons of Edinburgh very properly throw the responsibility of the failure of the conferences in London, during the last Session of Parliament, upon the College of Surgeons in London. They regret that failure. We cannot say we do, and if we did, the regrets are vain. The College of Surgeons of London is a College of pure Surgeons. Their function is the *encouragement* of surgical science and practice, but they have no *restrictive* powers. It never was intended to grant them any such powers. Any one may teach surgery, learn surgery, practise surgery, or call himself a Surgeon, without let or hindrance from the College of Surgeons. The assumption by the Council that they are, and ought to be, the only body in England upon whom the control of the education and examination in surgery of General Practitioners is to devolve, is perfectly gratuitous. The influence they exercise over the qualifications of the General Practitioners works only

for evil. It is an influence tending to degrade, and but for the innate energy, emulation, and talent of the English student, it would deplorably degrade the whole body of General Practitioners. We boldly state that there ought to be another authoritative body in surgery in England—a body exercising the control over surgery in connexion with medicine and the medical sciences generally. The existence of an independent general Examining Board, including surgery in its duties, could only have a beneficial influence, not only over the whole profession, but over the College of Surgeons itself. It would compel the Council of the College to devote its attention and its revenues exclusively to the advancement of surgical science and practice. It would excite its emulation in these laudable objects. It would settle all its contentions with the profession at large; compose its political difficulties; and render it what it ought to be, a College devoted to a special branch of medical science, and conferring honours and rewards upon the promoters of that branch of science. No injury results from the existence of two Universities in England, and the Government has found no difficulty in the establishment of various Colleges, which, in the sister kingdom might even be regarded as rivals. The College of Surgeons in England has no claim in law or equity to a monopoly of the fees of the General Practitioner for examinations in surgery, and no beneficial result can flow from sustaining them in such a monopoly. We trust that the deputations from the profession in their interviews with the Ministers of the Crown during the present Session of Parliament, will take care to disabuse the ministerial ear as to the claims and pretensions of the College of Surgeons of England, and neutralize the obstructive policy at present exerted by the Council of that College in the cause of Medical Reform.

POOR LAW MEDICAL RELIEF.

ANOTHER vigorous effort has been made by the Committee of Poor Law Medical Officers, through which they have brought their case prominently before the Premier. It is always difficult, and for a long time impracticable, to bring abuses which affect non-political classes in society under the notice of parties in power. When an audience is granted to plaints, embodied in official shape, through memorials and deputations, an admission of the existence of an evil and of the difficulties in the remedy, is for a while the only answer from head-quarters. A Minister beleaguered on each side, cannot be expected to satisfy the demands of all; yet, when time after time, complaints are raised with a loud voice, listened to with patience, and dwelt upon with ministerial avowals of interest and assurances of sympathy, and still no amended legislation is attempted, there is proof of weakness or insincerity, or indifference on the part of Government. However disheartening this view may be to some temperaments, who are apt to overlook the varied interests which must be cautiously dealt with in every change, the deputation have no special cause for dissatisfaction that they have not now gained more than an official assurance of attentive concern from the Premier. The burthen of the case is thrown back, very properly, upon the President of the Poor Law Board, and that too with the momentum of the Prime Minister. A great advantage to be derived from the deputation is the publicity given to the cause at head quarters, and the evidence thereby

afforded of the growing necessity there is for Government and the Poor Law Board setting to work, speedily and in earnest, to redress the grievance complained of.

It was encouraging to find that several new advocates of the cause were forthcoming among the Members of Parliament, such as General SIR DE LACY EVANS, and Mr. JACOB BELL; Dr. WILSON, of St. George's Hospital; Delegates from the Medico-Ethical Society, of Liverpool, and others of active influence. We remember that in the last Harveian Oration, delivered by DR. WILSON, a high tribute was paid to the Union Surgeons, and a just condemnation to those persons in authority who upheld the present iniquitous system. Before the Premier DR. WILSON again made a feeling and manly avowal of his sentiments, and placed the *morale* of the question in the very best light, in stating that it would be his duty to guard his pupils from having anything to do, in after life, with the Poor-law Board—"not to degrade themselves by taking a payment which is not offered to the lowest public officer in any other profession." Were it practicable to carry out this view, the evil would be extinct in half a generation; would have cured itself; indeed, such union among the members of the profession, could now at once compel the authorities to yield; but we know this cannot be accomplished. The Poor-Law Board and the Guardians know this also. How often must our noble, but devoted profession, be reminded that "Unity is strength." We remember the fruitless effort made, as shown in the third report of the Convention, to establish over the land a Poor Law Medical League. We cannot advise medical men to shun or resign their Poor Law appointments in disgust; there is a middle course to be adopted. Were the whole staff to resign to-morrow, in one month new men would be found to fill their places, with less independence; so that the new pliant body would fall more helplessly under the harsh dominion of the present system. To resign office now on "public principles," would be Quixotic in the extreme—a suicidal madness. Let the staff continue in office, day by day do well their duty with cheerfulness under renewed protest, and remember to maintain and extend the existing agitation. Let each gentleman feel it a part of his almost *daily* duty to represent with respectful earnestness to the Clergy, Magistrates, and Members of Parliament, in his district, the iniquitous character of the present system. None must be dispirited through want of immediate success, or the presence of many difficulties. These must be met by self-reliance and unremitting determination to conquer them,—by such indomitable resolution as Napoleon threw into a handful of troops, through this short address of gallant confidence:—"Mes amis, voyez vous ces magasins? Ils sont à nous!"—and charging boldly with his force, feeble in numbers, he took at once possession of the citadel. There are, it is to be feared, some in our ranks so apathetic or slothfully selfish that a higher motive of action than self-preservation cannot be found for them; our recollection of military story furnishes an anecdote, which such will do well to remember, in relation to the present system under the Poor Law Board and the Guardians. The Dutch General, La Chasse, led on his soldiers to battle, not by speaking of patriotism, courage, and immortal fame, but animated them by crying out, "My men, do you see those French? by Heaven, if you don't kill them, they'll kill you!"

Evils very similar to those complained of in England, exist in Ireland, through the "medical charities," respecting which a large and influential meeting of the Profession took place in Belfast, on the 24th ultimo. On this occasion, DR. MOFFAT said, "He believed the general opinion of the profession to be, that the present system was so bad, that any change with regard to it must be an improvement." LORD CLARENDON and SIR WILLIAM SOMERVILLE have rendered much aid to the cause, and their advocacy should be obtained in behalf of the Medical Officers and the sick poor on this side the Channel. The Convention, we hear, will lose no time in waiting, by deputation, on MR. BAINES, on which occasion MR. WAKLEY, M.P. (who was prevented attending before the Premier), will be present.

The President of the Poor Law Board will no longer evade the subject; the notice of LORD JOHN will urge him forward. There is also much evidence to prove, that in various parts of the country, Members of Parliament are prepared to sanction an amended legislation in the matter.

Let the Convention take care that advisers having no experience in working the medical department of the Poor Law, do not shackle the Medical Officers under an insignificant increase of pay, so that they cry out, "Save me from my friends."

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CXLIV.—CASE OF HYDROPHOBIA, OCCURRING TWENTY-EIGHT DAYS AFTER THE BITE OF A RABID DOG, AND TERMINATING IN DEATH ON THE FIFTH DAY AFTER THE COMMENCEMENT OF THE SYMPTOMS; with Remarks by P. REDFERN, M.D., Lecturer on Anatomy and Physiology, and on Histology, at the University and King's College, Aberdeen.—The subject of this case was a female child, living at Blackburn, eight miles and a half from Aberdeen, and attended during its illness by my friend, Dr. Rainy, of Kintore, who has very kindly furnished me with the following account of the symptoms and progress of the case, which I can substantiate as corresponding precisely with the statements made by the parents and friends of the patient to myself immediately on the termination of the case.

The child was two years of age, and was bitten by a dog on the 1st of March, 1850. Its right cheek was bitten completely through, and severely lacerated; and on the forehead were two other severe lacerated wounds, reaching to the bone. The wounds were carefully washed and dressed by my colleague, Dr. Rainy, of Aberdeen, who happened to be in the neighbourhood at the time, and they soon healed perfectly. The dog was pursued for a distance of two miles, and was lost sight of in a wood; but he was found next morning at a farm-house in the neighbourhood, apparently in a state of great exhaustion, and was killed by the servants. It was afterwards ascertained that, three days before he appeared at Blackburn, the dog was rabid, and was pursued and fired at in a neighbouring parish. At that time he bit several dogs, which were instantly killed. A dog which was bitten by him, on the same day as the child, is said to have become mad within twenty-four hours.

The child's general health continued good until Friday, March 29th (twenty-eight days after the bite), when an unusual degree of alarm and anxiety were manifested by it; these symptoms becoming so much worse on the Saturday and Sunday, that little doubt remained that hydrophobia was commencing. On offering fluid out of a polished tin can, out of which the child had always been in the habit of drinking, it refused to take it, closing its mouth, and appearing excessively alarmed lest this vessel should be again offered to it; yet, at the same time, and during a period of twenty-four hours from the commencement of the attack, it drank freely out of any other vessel. The state of alarm and anxiety increased steadily; intermittent general spasms came on, and became more and more violent as the disease advanced. The entrance of any person into the room—touching the surface to feel the pulse—even looking at the child, or offering it fluid, caused

violent convulsions, with spasmodic action of the diaphragm, indicated by pain and constriction in the epigastric and hypochondriac regions. During the first days the intermissions were occasionally of an hour's duration, but later in the disease the spasms occurred every ten or fifteen minutes. There was neither opisthotonos nor other form of tetanic spasm,—for the child lay on its side or clung to its mother during the spasms, or when any one attempted to touch it. Moreover, the intermissions were well marked throughout. Not a moment's sleep took place during the whole illness, the spasms always coming on when, on the first days, the child attempted to sleep; whilst no tendency to sleep was noticed later in the disease. On the day previous to death, the little patient was at times furious, "wicked," and attempted to scratch and bite. The pulse during the first and second days of illness was from 95 to 100 in the minute, feeble, and easily compressed, afterwards becoming more feeble, and occasionally above 130 in the minute. The skin was rough and dry at first, but became soft and moist during the last twenty-four hours. The bowels were confined at the commencement, but there were two free motions on each of the last three days of the illness. The urine was passed regularly, but in small quantity. On the third day after the attack, a reddish blush appeared in the cicatrices, and extended fully an inch around them, but no supuration occurred. During the last twelve hours considerable foaming at the mouth took place, and the frothy fluid was immediately removed by the attendants. Death occurred in the interval of convulsions, apparently from exhaustion, at half-past nine o'clock A.M., on Wednesday the 3rd of April, the fifth day after the first symptoms were noticed, and thirty-three days after the bite of the dog. During the whole illness, two grain doses of calomel were given every two hours, without purging, or other sensible effect. Two drop doses of solution of morphia were administered during the last thirty-six hours, between the paroxysms, but without any apparent effect. Not more than twenty drops were given altogether.

The *Post-mortem Examination* was made by myself with the greatest care, in the presence of Drs. A. and G. Rainy, twenty-seven hours after death, and the appearances were as follows:—Body tolerably plump; abdomen distended with flatus; countenance expressive of great distress. A deep radiate cicatrix indicates the position of the wound on the right cheek; and two cicatrices, 1 inch and 1½ inch long respectively, adhering to the frontal bone, show the position of the other wounds.

Head and Spine.—Cranial integuments healthy; calvarium removed with great difficulty, owing to adhesions of the dura mater along the line of the sagittal suture, and in the position of the anterior fontanelle, which is yet open to the extent of three-fourths of an inch. On the external surface of the dura mater of the spinal cord, opposite to the fourth, fifth, and sixth dorsal, to the twelfth dorsal, and two upper lumbar vertebrae, a thin layer of extravasated and partially coagulated blood exists, but every other part of the membrane appears healthy. The pia mater of the brain and cord appears slightly increased in vascularity. The posterior sub-arachnoid space, at the lower part of the cord, contains an ounce and a-half of clear serous fluid, and a small quantity of similar fluid exists at the base of the brain. The substance of the brain and cerebellum present larger and more numerous bloody points than usual; the lateral ventricles contain half a drachm of clear serum; the velum interpositum is considerably congested; but all the other parts of the encephalic and spinal mass are perfectly healthy, as shown by microscopic examination of every part presenting the slightest appearance of softening or other disease. The medulla oblongata, and the origins of the cranial nerves, especially of the fifth and eighth pairs, were subjected to a most careful microscopic examination, but not a trace of disease could be detected.

Neck and Chest.—The pharynx, fauces, tongue, salivary glands, larynx, and trachea, have been carefully examined, but show no evident traces of disease. The papillæ circumvallate appear a little larger than usual. No vesicles exist under the tongue. Pleuræ healthy; lungs both crepitant throughout; lower lobes both slightly congested; bronchi contain a reddish frothy fluid. Heart and pericardium healthy.

Abdomen.—Two reddened spots, about the size of the end of the little finger, exist on the mucous membrane of the back of the stomach near the oesophagus. The stomach contains two ounces of dark fluid like coffee-grounds. The small intestines are distended with gas, and the ileum contains a large quantity of very dark-greenish matter of considerable consistence. Along the whole length of the small intestine the solitary glands are of large size, closed, and they project considerably, appearing to be in equal number in the jejunum and ileum. The patches of Peyer are not unusually prominent. The large intestines are healthy,

and contain dark feculent matter in small quantity. The liver appears very large, but cannot conveniently be weighed; it is of a pale yellow colour, mottled, and has all its cells full of very large oil globules, as in an extreme state of fatty degeneration. Pancreas healthy. Spleen small, firm, and healthy in structure. Kidneys pale but healthy. Bladder contains three and a half ounces of very turbid urine.

Remarks.—The very decided madness of the dog which caused the wounds in the subject of this case,—the complete inoculation which such extensive wounds on a part not covered with clothes were calculated to produce,—the total absence of the slightest suspicion that the disease owed its origin to the influence of the imagination, or to any other cause than the bite of a rabid dog,—the gradual and insidious commencement of the symptoms after an interval of perfect health and the healing of the wounds,—the occurrence of redness in the neighbourhood of the injuries,—the steady, determined, and dreadful increase in the intensity of the symptoms as time wore away,—the inexpressibly horrible nature of the symptoms themselves, and their termination in death without the indication of any physical change capable of producing or explaining them, alike lead to the conclusion, that the disease was the most horrible of all human afflictions—hydrophobia. The certainty attending the nature of the case rendered me doubly anxious to make a careful examination of the body, and I was enabled to do this under the most favourable circumstances by the kindness of my friends, Drs. A. and G. Rainy. The *post-mortem* appearances most worthy of notice are the slight congestion of the pia mater of the brain and cord, the more considerable congestion of the velum interpositum, the quantity of the fluid in the posterior sub-arachnoid space, and at the base of the brain, and the slight extravasations outside the dura mater of the cord in two circumscribed spots. The thinness of the clots of extravasated blood, and their existence outside the dura mater, preclude the idea of their having been in any way concerned in the production of the symptoms. It is impossible to state with certainty how they were produced, but the conjecture that they resulted from the convulsions appears liable to fewer objections than any other. What influence may have been exerted by the slight congestion of the pia mater of the brain and cord, of the velum interpositum, and of the substance of the cerebrum and cerebellum, it seems quite impossible to determine in the present state of our knowledge; for, whilst in amount it appears to fall very far short of a congestion capable of influencing the nervous centres to any material extent by compression, we must not forget the lesson taught us by the pathology of those cases of cerebral apoplexy in which no trace of congestion or effusion is found after death. Moreover, congestion appears by no means a constant occurrence in hydrophobia, as it was absent in Dr. J. A. Sidey's case*, examined by Professor Bennett, and in many instances occurring to M. Gendrin, and others. In the cases of Dr. Lucas† and Dr. James Struthers,‡ Dr. W. T. Gairdner found slight congestion; but neither he nor Professor Bennett could detect any change of structure in the nervous centres, or eighth pair of nerves, though we may be satisfied that they used every existing means for that purpose.

In the present instance, I was led to the careful microscopic examination of every suspicious part of the nervous centres, and especially of the eighth pair of nerves, by the suggestion of Dr. Bennett, in his excellent article on Hydrophobia in the "Library of Medicine," but the structure of every part appeared perfectly healthy. Such results, in several instances, after the use of our most important means of research by different individuals, point to the imperfection of our knowledge, too plainly to be misunderstood. We are still in great darkness regarding the normal action of the nervous centres, and it is, therefore, extremely improbable that we shall be able to comprehend their diseased actions as long as this state remains. Yet it is the duty of every one who is furnished with the opportunities, to add to the number of carefully conducted pathological inquiries; for, as physiological and pathological phenomena and laws mutually explain each other, the inquiry may be successfully carried on in both directions at the same time. At present we know nothing of the structural characters of the nervous centres after death from rabies, in the lower animals, though the disease is so common: we have not even ascertained the absence of any lesion capable of being detected by our present means of research. This is, therefore, a very important part of the inquiry; for, if a structural lesion causes the fearful symptoms of this disease, there cannot be a doubt that it is capable of being detected in the lower animals as readily as in

* Monthly Journal, vol. xi., p. 506.

† Ibid, vol. ix., p. 936.

‡ Ibid, vol. xii., p. 9.

man; and if the symptoms occur without a material change, this, too, may be ascertained with equal satisfaction by the same method. I may here remark, that I shall feel greatly obliged for any opportunities of examining animals recently dead of hydrophobia, which may be afforded me by those into whose possession they may happen to fall; and that, should such examinations accumulate and appear of sufficient importance, I shall not fail to lay the results before the profession. But it is not at all improbable that no structural lesion whatever exists in this and in many other nervous diseases, for there is much more than matter to be attended to, and every observable phenomenon is doubtless of the utmost importance. We have scarcely achieved more in the examination of purely vital actions than to ascertain the existence of a vital force, energy, or principle, which has hitherto eluded our grasp, and is yet most powerful in determining the action of various forms of matter. Matteucci and others have opened up a vast field of research in the observation of several of the most wonderful phenomena of organization, and have abundantly proved to us that there are yet many volumes of the book of nature, the perusal of which we have not commenced. It is, indeed, already shown that a particular force is manifested in animals in the physiological actions of the nervous and muscular systems, and that, though this force resembles electricity, yet it is perfectly distinct from it. How possible, then, does it appear, that an increased or perverted action of such a force upon the tissues of an animal body may give rise to the whole phenomena of alarming and destructive diseases, and yet leave their structure without a single evidence of material change?—*Monthly Journal of Medical Science*, Feb. 1851.

CXLV.—LARGE CEREBRAL ABSCESS IN AN EPILEPTIC SUBJECT.—POST MORTEM.—By M. SISSA.—It is so rarely that any material, or appreciable anatomical cause for epilepsy is found, that we cannot too carefully collect cases bearing upon it.

Belluti, 29 years of age, consulted M. Sissa. He had been attacked about three weeks previously, with a malady which his first physician had recognised as epilepsy. When the paroxysms returned, he experienced a tingling in the ears. He was then seized with a pricking sensation along the spinal cord, which extended thence to the arms and legs. He would then call for help, lie down on his bed, and violent convulsive movements of the whole body would come on, attended with loss of consciousness, and foaming at the mouth. This condition would last about two hours.

The first fit had occurred on the 18th of February, the second on the 20th of the same month, with increased violence. In spite of a treatment which produced some amendment, he had already had nine attacks when he consulted M. Sissa. The latter remarked a degree of wildness in his general attitude, and in the movement of the eyes of his patient. With this exception, his intellectual faculties were intact. There was no acceleration of the pulse or increased heat of skin. He complained of heaviness of the head, and likened it to having on a leaden cap.

After long consideration as to the cause of these symptoms, M. Sissa formed the following diagnosis: that there was slow arachnitis of the cerebro-spinal system. He prescribed bleeding, leeches to the emissaria of Santorini, mercurial frictions along the back, even to salivation, either alone, or in combination with belladonna and aconitine. He also employed saline purgatives, calomel and jalap, and even sulphate of iron, with squills and aloes. By means of this simple therapeutic treatment, says our author, I suspended the fits until the 30th March. But on this day the patient being a little fatigued, was again seized with convulsive fits. The same treatment was recommended, and a large blister applied to the nucha, afterwards kept open with mercurial ointment.

In about eight days the patient began to complain of headache, which, commencing on the right side, spread over the head; it continued during the day, and returned at the same hour on the following day. Subdued by the sulphate of quinine, it gave place to another pain, a little above the union of the right parietal bone with the occipital, which thence extended over the whole head, and did not again abate. The patient however ate, walked, and had no appearance of fever. In spite of bleeding, purgatives, and revulsives, things remained the same, until the 2nd of May, when the pain became all at once insupportable. The patient uttered continual cries, which neither fresh bleedings, nor the applications of ice could appease. Every movement increased the suffering; his arms were agitated with convulsive tremblings; still these alarming symptoms were unaccompanied by the slightest fever. All means proved useless, and on the 9th of May he died, without paralysis, without symptoms of apoplexy,

and not having, for nearly forty days, shown any marked signs of epilepsy.

Post-mortem.—The skull was of extraordinary hardness, though not thicker than usual. After the removal of the osseous cap, the cerebral mass quickly escaped, as though it had been previously subjected to strong compression. The dura mater was nearly cartilaginous, with its sinuses empty, while the arachnoid and pia-mater on the contrary were gorged with blood. The cortical substance of the brain was very thin, compared with the white substance. On detaching the brain a quantity of greenish pus escaped from the right posterior lobe. On continuing the examination a nearly round cavity was discovered in this lobe, large enough to contain a hen's egg, full of greenish pus, of the consistence of cream, and without smell. They estimated the quantity at about two ounces. The cavity was not covered with a cyst; it rather seemed that the cerebral fibres went out of the way to receive the purulent liquid. The other parts of the coats presented a rather marked state of softening, but it was not easy to decide whether it was connected with inflammation, or the effect of decomposition.—*Nouvelle Encyclographie des Sciences Médicales*.

CXLVI.—INTRA UTERINE POLYPUS, OF A LARGE SIZE, SUCCESSFULLY OPERATED ON. By W. F. MONTGOMERY, M.D., Professor of Midwifery to the King and Queen's College of Physicians in Ireland.—On the 27th March, 1850, I was urgently requested to visit a lady at Black Rock, who was said to be suffering such intense pain that her friends thought she could not survive if relief were not speedily obtained. On my arrival there, I found her to be about forty years of age, unmarried, and in violent agony, almost frantic with her sufferings, which recurred periodically, and resembled labour pain; she was quite blanched, and partially œdematous; and had been ill, her friends said, from time to time, for between four and five years, during which she had occasional pain, and leucorrhœal and sanguineous discharges from the uterus to a large amount.

On examination, which she consented to with great reluctance, I found the pains were produced by regular and strong contractile efforts of the uterus, the mouth of which was open to the size of a shilling, with very firm margins, and becoming very tense during each pain. Immediately within it I could distinctly feel a round tumour, which was pressed strongly into the circle of the os by every pain; in fact, there was within the cavity of the uterus a polypus of considerable size, which the organ was endeavouring to expel, by efforts like those of ordinary labour. There was a tumour in the abdomen, inclining towards the right side, and reaching nearly as high as the umbilicus.

She was suffering so severely, and was so exhausted by the pain, that I thought it necessary to give her a cordial and an opiate, from which she derived immediate relief; the uterine efforts ceased, the polypus receded, and the os uteri gradually closed after a few days.

She was then given tonics, under which her health improved surprisingly, and no further change of importance occurred until

May 27th, when, after taking a walk, severe pain again came on, with hæmorrhage, and lasted three days; in consequence of which I saw her again on

May 29th, when I found the os uteri, which had been very rigid and unyielding two months before, much more open, thinner, and so relaxed as to allow me to pass my finger freely into the uterus and round the tumour, which appeared to me to have a broad and very firm attachment.

June 15th. She is looking wonderfully better, but had a sharp attack of pain and hæmorrhage on the 10th, which lasted several hours.

Under such circumstances, with frequently-repeated and severe paroxysms of pain, and with large discharges of an exhausting character, I reflected often and anxiously on what I ought to do. I felt it was highly desirable that the tumour should be, *if practicable*, removed with the least possible delay; lest the patient should sink under the exhaustion produced by severe pain and hæmorrhage. But how was its removal to be accomplished? There were, first, a very contracted vagina; second, an os uteri only partially open; third, a large tumour within it; with (fourth), as far as I could judge, a very broad and firm attachment.

Then, by what means might the descent of the tumour be promoted or effected?

1. Ergot of rye might be given to aid the expulsive efforts of the uterus.

2. The polypus might be drawn down by force with hook forceps.

3. An attempt might be made to crush the substance of the tumour by a strong forcers.

4. There was the alternative of leaving it to time.

I greatly doubted that the action of ergot, or the attempt to pull the polypus down, would succeed; and if either did, I thought it almost certain that, from the extent and firmness of the attachment, its descent, *so produced*, would almost inevitably have brought down with it the fundus uteri; and thus inversion of the organ be superadded to the already existing formidable disease.

The attempt to crush and break up the substance of the tumour I regarded as equally objectionable: for, first, it would have been very difficult to make, on account of the narrow vagina and only partially opened os; secondly, the firmness of the tumour was such as would render the attempt to break it down very likely to fail; and, thirdly, in doing so I thought it highly probable that large vessels would be opened, and a dangerous hæmorrhage produced.

I therefore rejected all these plans (which, under suitable circumstances, have been adopted with success), and considering that, as yet, the patient's health was not deteriorating, but improving, and her patience and fortitude unimpaired, I decided on adopting the policy of Fabius, "*vincere cunctando*," and I had afterwards great reason to rejoice that I came to this decision.

In July she left town for three weeks; on the 15th of that month she had a very severe attack of pain of an expulsive kind, with great flooding; and when I examined her on the 24th, the large end of the polypus had fairly cleared the os uteri, and I advised her coming to town to have the operation for its removal performed.

I next saw her on August 2nd, and on the 9th I passed a ligature round the neck of the polypus, fully three inches within the os uteri, by means of Niessen's double canula, and more than six inches of ligature were taken up in encircling the attachment of the tumour. On the

11th symptoms of putrefaction were perceptible, and continued to increase. On the

14th the ligature appeared to be drawn home, and on twisting the canula it broke, but the polypus would not come away, though the amount of attachment remaining undivided could not have been more than a quarter of an inch in thickness.

The discharge now became horribly offensive, the pulse very quick, and the stomach irritable, so that I began to be very anxious about the result, and to fear that it would be unfortunate; yet the patient never lost courage, but maintained the most complete composure and unshaken fortitude throughout; took food freely, and slept well, never for one moment doubting, as she afterwards assured me, that she would ultimately recover, as I had promised her. And thus passed over the 15th, 16th, and 17th; each day I tried to draw the polypus down, but it seemed to be firmly grasped by the uterus, and was quite immovable, so that no force of traction that I could safely exert was sufficient to bring it away until the 18th, that is, the ninth day from the application of the ligature, when, greatly to my satisfaction, I succeeded in extracting it; from which moment the lady never had an unpleasant symptom.

The tumour, when it came away, was greatly decomposed, softened, and consequently reduced in size, portions of it having also been torn and cut away in the attempts to get it down; but still it was of considerable bulk, measuring about five inches in length and three in breadth.

As soon as the polypus was removed I found that the tumour in the abdomen became suddenly greatly reduced in size, and in a few days was no longer to be felt.

The lady's recovery was rapid and uninterrupted; she was in the drawing-room in four days, and left town on the 28th, ten days after the extraction of the polypus; and since her return to the country, I have been informed by her brother that she is in the enjoyment of perfect health.—*Dublin Quarterly*, Feb. 1851.

CXLVII.—NOTES ON CHOLERA, DYSENTERY, SHIP FEVER, AND INTERMITTENT FEVER. By JAMES D. TRASK, M.D.—*Cholera*.—During the summer of 1849, the cholera made its appearance close upon the heels of ship fever, when the house was just beginning to recover its ordinary condition of health. Up to this time there had been no case of cholera, so far as I can learn, between this place and New York, nor was there any evidence of its introduction from that city. Repeated warnings had been given the inmates, that they should apply for medical aid the moment that any one should perceive in himself any disposition to diarrhoea; but as yet few if any had presented themselves, when two men, sleeping in beds almost adjoining, were suddenly taken

with cramps, vomiting, and diarrhoea after midnight, and before noon were both dead. On the same day, a female at the opposite end of the establishment was similarly seized, and died within twenty-four hours. From this there were some three or four new attacks daily among the inmates of the house. The paupers at this season of the year were the infirm and aged, children and lunatics. Upon the latter the pestilence fell with the greatest severity, about one-half the victims being from these unfortunates. It was impossible, in general, to learn anything of their condition until the disease was fully developed.

Immediately on the appearance of the disease, it was discovered that a large number had for many days been suffering from diarrhoea, which they had kept concealed from the keeper and medical attendant. During the continuance of the cholera, cases of diarrhoea were constantly occurring, and every patient, seized with cramps, vomiting, and serous discharges from the bowels, so far as could be ascertained, had laboured under diarrhoea for several days previous. Not a few suffered themselves to run down under continued diarrhoea, without applying for aid, until too late, notwithstanding the daily warnings from the death of those around them. One nurse had three distinct attacks of cramps, vomiting, and serous diarrhoea within five or six days, each traceable to reckless imprudence, and completed his week's work by catching a mess of fish on the Sabbath, and cooking them by stealth; and within a half hour after eating the same he was dead. This is not a solitary illustration of the abject moral condition to which the inmate of the almshouse has too often, I may say, generally fallen.

In the treatment of cholera, we had unquestionable evidence of the utility of calomel and opium. The usual mode of administration was, that of from three to five grains of calomel and one of opium every two hours, until the action of the liver became re-established. The reappearance of bile in the evacuations was anxiously looked for, and when observed, it was regarded as indicating a favourable turn in the course of the disease. In one instance, the attack being very sudden and severe, one grain was given every ten minutes, with three or four drops of laudanum, and the patient recovered.

In one case of collapse scalding water was applied to the abdomen, and calomel given in one-half drachm doses every half hour, for two hours; but the result in this instance did not encourage a repetition of such heroic practice, even in desperate cases. There were but two examples of secondary fever following reaction from collapse, and both proved fatal.

In the latter part of the epidemic, my attention was directed more to the necessity of controlling the diarrhoea, as such. The constant prevalence of diarrhoea, during the entire epidemic, presented what seemed to be a series of examples of cholera from its simplest up to its most grave and fatal forms; and pressed upon the mind most forcibly the conviction that all these cases were the result of the same morbid cause; and we were compelled to admit the conclusion, now so generally entertained, that the diarrhoea is not a premonitory, or *admonitory* symptom, but the first stage of the disease itself; not that every case of diarrhoea would, if left alone, have terminated in collapse; but that any of them *might* thus terminate.

In the treatment of diarrhoea, a mixture of aqua ammonia, spirits of camphor, tincture of opium and tannin, was kept prepared, and directed to be freely given to those who applied for relief. This, with a recumbent position, was generally successful.

During the state of collapse, frictions with capsicum were found more effectual in inducing reaction than any other agent. The vapour and hot air bath were faithfully tried, but little benefit resulted from their employment. Conjoined with frictions was the moderate use of the solution of chloroform in camphor and spirits of nitre.

The theory of the dependence of cholera upon the existence of an agent in the atmosphere called ozone, and the fact of its being neutralized by contact with sulphurous acid gas, early attracted our attention. It was evident that the combustion of but a small quantity of sulphur would be sufficient to neutralize all the ozone the atmosphere of the buildings might contain. A quantity of flowers of sulphur were stirred into a strong solution of nitre, until the whole was of the consistence of cream. Several yards of common lamp-wick were then dipped into the mixture, and, after being withdrawn, were dried in the sun, thus forming a slow match, encrusted with sulphur. A coil was put in each room, on a plate of metal, and set on fire at one end. A little attention was required every hour or two, to renew the coil when burnt out, and the apartments were by this means constantly filled with an odour of sulphurous acid, just barely perceptible. Should it ever be deemed desirable to push the experiment on this alleged influence of sulphur fumes, in

destroying the morbid poison, this is confidently recommended as a convenient mode of securing a continuous and moderate supply of the sulphurous acid gas. Our limited experience does not warrant the expression of any opinion upon the utility of the measure. Unfortunately, in consequence of the great press of duties at the time, I neglected to test the presence of ozone, and the effect of the sulphurous acid gas, if any, upon it, by iodide of potassium. There were, during the epidemic, forty-seven cases and twenty-seven deaths.

Dysentery.—Very soon after the disappearance of cholera, dysentery, which was then prevalent in the surrounding country, made its appearance in the house. Both here and in the neighbourhood the character and progress of the disease seemed to be modified by the cholera atmosphere. There was in many instances a degree of prostration attending the disease which could not have been anticipated, and which must have been due to atmospheric causes.

In the treatment, reliance was placed on opiate enemata, nitric acid and laudanum, mucilage, fomentations, or blisters to the abdomen very early if fomentations failed to relieve the pain and tenderness. When there was marked deficiency of biliary secretions, calomel was employed, usually in small quantities, as one-sixth of a grain of calomel with an equal quantity of opium and a half grain of ipecac. every two hours. The gums were frequently tender in twenty-four or thirty-six hours, and then convalescence was confidently expected. In a severe case of diarrhoea attended with great prostration, after the failure of many other remedies a half drachm of sulphate of zinc was given in an enema with a pint of water and two drachms of laudanum. The patient rallied at once and recovered. Nitrate of silver was frequently given in enemata, of the strength of fifteen grains to half a drachm, to the ounce of water, followed immediately by an enema containing a drachm or two of laudanum to relieve the tenesmus caused by the caustic.

I may remark that this treatment was adopted first in private practice, in the case of an old gentleman who was labouring under a severe chronic diarrhoea, the sequel of a grave attack of dysentery. At the end of the fifth week, when a large number of remedies had been resorted to in vain, among which were enemata of strong solutions of sulphate of zinc, of acetate of lead, of opium, and of tannin, and the administration of the same by the mouth, a solution of half a drachm of the crystallized nitrate dissolved in an ounce of rain water was thrown up the rectum by a glass syringe. It was not retained a minute, and caused a good deal of tenesmus for some time after the injection of starch and laudanum, which was given immediately. Previous to this, his discharges had generally occurred as often as once in two hours. He now had none for fourteen hours, and in the remaining ten hours had five, but they were less in quantity than before. All medicine by the mouth was suspended except a few drops of sweet spirits of nitre. During the next twenty-four hours he had five dejections, small and quite consistent. That day he had another enema containing only fifteen grains of the caustic followed by the opiate, and during the next twenty-four hours he had but three dejections. From this time he gained strength, and in eight days from the first employment of the nitrate of silver he was walking about the house; more or less irritability of the bowels continued through the winter following, owing to his uncontrollable determination to eat and act just as he pleased.

Ship Fever.—It has been already remarked that a large number of our cases of fever occurred in persons employed on the railroad. Many of these had been in this country several months, and several two years or more. The symptoms presented by them were, nevertheless, identical with those in persons recently landed. The conditions under which such persons live are abundantly favourable for the development and propagation of the poison of typhus; the shanties which they occupy being crowded to excess. I have notes of nearly one hundred cases, but from the imperfection of the details in several, I shall only give a few general results.

During the prevalence of ship fever, we had several cases of common bilious remittent, but never a perfectly well-marked case of typhoid fever as seen in the New England States.

The earlier symptoms were almost uniformly stated to be, chills followed by flushes of heat, and pain in the head, back and limbs; sometimes in the head and none in the back and limbs, and in other cases severe pains in the back and extremities without headache. Accompanying these there was almost uniformly a sense of great debility; in two cases there was great depression of spirits; sleep was very generally disturbed by bad dreams; nausea was occasionally complained of, but not generally; the bowels were generally torpid on admission.

When the disease became fully developed, complications were

of frequent occurrence, and were universally met with in fatal cases; in the winter and early spring, bronchitis complicated almost every case; later in the season, the abdominal and cerebral organs were those most generally involved. Bronchitis, though in many instances severe, was fatal in only one case; two died from pneumonia.

In a few cases, the force of the disease fell upon the brain from the first. These patients were early seized with general tremulousness of the whole system, with insomnia, and more or less delirium; at first only at night, but at a very early stage of the disease, constant. In one case violent convulsions took place repeatedly during two or three days preceding death. Lesions of the brain afforded the prominent symptoms in at least three-fourths of the fatal cases.

The tongue was almost uniformly covered in the middle with thin white fur, the tip and edges being of a brighter red than natural. Later, the white fur became yellow and thick, and in bad cases brown. In several cases there was inflammation of the fauces. There were two cases of parotitis of one side, which resulted in suppuration, both fatal. Some tenderness of the abdomen existed in a large proportion of cases; diarrhoea was by no means of general occurrence.

The pulse averaged from 115 to 120; in grave cases they reached 140 and remained so for several days. In only two cases was the pulse observed to be below the healthy standard, in these it was only 50 during several days.

Petechia were not always found; they were absent in at least one-third of the cases. When they occurred they were usually abundant, scattered over the extremities as well as the trunk, of a dingy red, and resembling somewhat in general aspect the eruption of measles. They did not entirely disappear on pressure. Their general duration I am unable to state; in one case in which they were of a bright rose colour, and not unlike those in typhoid fever, they disappeared on pressure and lasted six days.

Convalescence was quite generally preceded by a critical sweat, in a few instances by diarrhoea or epistaxis; but so far as could be observed, they did not occur on any particular days. It was, however, frequently difficult to determine from the patient's account the date of the commencement of the attack. For this reason the entire duration of the fever could not be correctly ascertained, but from a rough estimate, it was not far from sixteen days.

The mortality was about one in five.

Relapses were of very frequent occurrence, and seemed to arise without any assignable exposure or imprudence. There was at least one case of the occurrence of the fever in the same person three times in succession, the patient having had an interval of health of a few days in which he was able to work.

There could be no doubt of the infectious character of the disease. During the winter of 1847-1848, the two attending physicians fell victims to the disease; soon after another experienced it. A medical student was also seized, and almost every nurse suffered severely from it; and as has been already stated it eventually prevailed among the inmates of the establishment.

The treatment was for the most part very simple. In most cases a dose of castor oil was required on admission. The surface was directed to be washed with soap and water and the patient put upon spt. mindereri, a tablespoonful three times a day. Nausea was overcome by sinapisms to the stomach and the application of ice; tenderness of the abdomen generally yielded to a blister, when hot fomentations failed. If there existed any particular disturbance of the nervous system, two to five grains of camphor and half a grain or a grain of ipecac. were given every three or four hours. The solution of camphor in chloroform was given with good effect in the same class of cases. Cold applications to the head were often required, and blisters to the nucha or to the shaved scalp, often acted most admirably in subduing cerebral irritation. Dover's powder and camphor, ten grains of the former and five of the latter, were uniformly given when the patient did not sleep well at night, unless there were symptoms of coma, or satisfactory coincidence of active inflammation of the brain.

Stimulants were in most cases required at an early date, and their effect in allaying irritability of the cerebro-spinal system was often very gratifying. One prominent cause of the large mortality was the faithlessness of attendants, who often drank the stimulants intended for the sick.

But few *post-mortems* were made. In two instances in which violent delirium had existed, meningitis was discovered. In the only instance in which I had the opportunity of making a thorough examination of the whole body, inflammation of the arachnoid of the upper surface of the hemispheres, with opacity and thickening, was very strongly marked. The spleen was

enlarged and readily broke down under the fingers. The liver was apparently healthy. The intestinal tube was carefully examined, and not the slightest appearance of inflammation or enlargement of the glands, or inflammation of the mucous surface could be observed.

The average age of patients was 27 years.

Intermittent Fever.—This, I have almost uniformly treated, by giving ten grains of quinine in powder, some four or five hours previous to the anticipated recurrence of the paroxysm. One dose has almost uniformly effected a cure. In some instances it has failed to arrest the expected attack, from its occurring at an earlier hour than before, or from the patients delaying too long the taking of the medicine. Nevertheless, in these cases, subsequent attacks have been prevented. I may remark that the quinine in the large doses referred to does not produce physiological effects proportional in intensity to the quantity taken. Not unfrequently have ten grains been given, without producing any of its ordinary physiological effects.

Ferro-prussiate of iron has often been employed, and with advantage, though it cannot be compared with quinine as an antiperiodic. Two cases were under treatment for several months, during which they were subjected to the effects of quinine in large and small doses, of Prussian blue and of arsenic; and proper attention was at the same time paid to a regulation of the various functions of the body. In one there was no evidence of any local congestion; in the other there was some enlargement of the liver; neither was cured. The case of the latter was rendered interesting, from certain anomalous symptoms connected with its progress.

In September, he entered, with tertian intermittent, which readily yielded to quinine. He went out and worked, and at the end of a month again entered, and was under treatment a month, and discharged, and in about four weeks was re-admitted. He now had sometimes twenty "shaking fits" daily, sometimes of the head alone, at others of various limbs. At night, the bed was often heard shaking.

After awhile he suffered from intense neuralgic pains in the head. At the end of three months, his condition was as follows. In addition to the severe pains in the head and face, "pulse 66; respiration 130 in a minute." Of the frequency of the respirations, there was no room for doubt. I repeatedly counted the respirations during an entire minute, and there were that number of distinct inspirations in that period. At this time, "the pupil was seemingly somewhat contracted; but there were no evidences of cerebral congestion. When his attention is arrested, he starts up as from a doze; *breathes naturally while engaged in conversation*, and talks naturally; but on letting him alone, the rapid respiration returns, and he lies on his back, with his eyes wide open, as if insensible. Bowels have been torpid, but are readily moved by croton oil." He remained in about the same condition for six months. The paroxysms of rapid breathing continued to recur at intervals, lasting for several hours at a time. Between these, it was not uncommon to find him apparently very comfortable, and he would speak of himself as feeling "first-rate." The only local lesion that could be detected was an enlargement of the liver; it descended about a finger's breadth below the edge of the ribs. His emaciation was extreme. He died of dysentery, during the epidemic, having inflammation of the fauces. No post-mortem examination could be obtained.—*American Journal*, Oct. 1850.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

The decrease in the deaths of London, which was announced in the last return, has been followed by an increase to the same extent, and the rate of mortality is again equal to that which prevailed during the first two weeks of January. The deaths, which in the previous week were 956, have risen to 1,041—a number which nearly coincides with the average (namely, 1,059) as derived from the returns of ten corresponding weeks in 1841-50; but they are less by 114 than this average, if it be corrected on the assumption that population has increased at the same rate as it did between the censuses of 1831 and 1841. The following statement of mortality at several periods of life shows that the increase now observed on the preceding week, though considerable, is entirely confined to persons of mature years, the numbers of the young, who died under 15 years, remaining precisely the same; and it also appears that, as compared with the average of former years, last week's mortality gives a small increase among persons of middle age: results which in part are apparently due to the fact that 153 deaths, being more than the usual number, are entered in the present Bill as caused by consumption; and though pneumonia has latterly been di-

minished in fatality to the young, bronchitis has become more fatal to the more advanced in life.

	Average of 10 corresponding weeks (1841-50).	Deaths in pre- vious week, ending Jan. 25, 1851.	Deaths last week.
From birth to 15 years	- - 458	443	443
" 15 years to 60	- - 346	325	356
" 60 and upwards	- - 252	188	232

In the epidemic class, small-pox was fatal last week to 16 children and 8 men, whose ages were between 20 and 35 (the 19 deaths from this disease showing a decrease of 13 on the previous week); measles was fatal to 30 children, being an increase; scarlatina to 16 lives, hooping-cough to 51. Typhus and diarrhoea seem to increase slightly, and the deaths from these in this return are 48 and 25 respectively. This class, which now comprises 230 deaths, is above the average, and seems to make progress.

Out of the whole number of cases in which small-pox was fatal, it is stated only in three that vaccination had been performed. The Registrar of Christchurch, Marylebone, mentions that 12 deaths, caused by this disease, were registered in his sub-district in January, which, with one exception, were those of children, and in only one of these cases had vaccination been permitted by the parents, though gratuitously offered to nearly all. A man of 24 years, who died in Bath-street, City-road, from confluent small-pox, after 15 days' illness, is reported to have been vaccinated three times ineffectually. The death of an infant, aged only 12 days, was caused by "chicken-pox (twelve days' illness) terminating in convulsions, with congestion of the brain and bowels."

In St. James, Bermondsey, at 4 Providence-buildings, a boy aged 7 years died of "arachnitis (three weeks)." Mr. Martin, the Registrar, adds that, "several children who live on this spot are now ill; the tidal ditch is abominably offensive, and worse than he has ever known it at this season during upwards of twenty years, and yet it affords the only water which some of the inhabitants of Jacob's Island are able to procure for drink. He has another patient in the same court, whose life, he believes, will be sacrificed to the surrounding abominations."

The births of 773 boys and 764 girls, in all 1537 children, were registered in the week. The average number in six corresponding weeks of 1845-50, was 1395.

FLOURENS ON CHLORINATED HYDROCHLORIC ETHER.

A new substance has been proposed by chemists, as possessing in a very high degree the power of suspending the sensibility of the tissues in animals submitted to its influence. M. Florens (on the 20th instant) informed the Academy of Sciences of Paris, of some experiments he has lately made, with the view of studying the effects of chlorinated hydrochloric ether upon animals. The learned physiologist has subjected several dogs to the inhalation of this ether (prepared by M. Ed. Robin), and all of them were affected with general anaesthesia, some in from three to four minutes, and others in four or five. The sciatic nerve, which, in some of the cases, was laid bare, was found to have lost all sensibility, but to retain its motive power. Not one of the dogs died.

M. Florens then tried the effect of injecting it into the arteries. He threw into the right crural artery of several dogs, from 2 to 21.2 grammes (say 40 grains to 400) of chlorinated hydrochloric ether.

At the moment of injection the animal gave a cry of pain. There succeeded sudden paralysis of the posterior extremity; the sciatic nerve, laid bare, still retained its sensibility, but had lost all motive power. Chlorinated hydrochloric ether has, therefore, whether inhaled or injected, the same action as chloroform. This, injected into the arteries, immediately produces paralysis of the muscles, with tetanic rigidity; as also do the volatile oils of turpentine, mint, rosemary, fennel, &c. On the contrary, the ordinary ethers, the fixed oils, oil of olives, oil of naphtha, sulphuric acid, ammonia, and camphor, produce muscular paralysis, with relaxation of the fibres.

Moreover, these experiments appear to separate muscular from nervous action; for, on the one hand, tetanic rigidity exhibits itself even when the motivity of the nerve is not lost; and, on the contrary, muscular relaxation occurs while the motivity of the nerve remains. There is thus a visible independence in the action of the nerve, and that of the muscle.

COLLEGE OF PHYSICIANS OF EDINBURGH.

The second of the series of lectures to be delivered this session in the hall of the College, will be given by Professor Bennett, on the evening of Monday the 10th of February. The subject of the lecture will be, "On Colour, as observed in Plants and Animals."

SALINE ARTESIAN WELL,

The boring of the famous artesian well, the Schonborn, at Kissingen in Rhenish Bavaria, which commenced in 1822, has recently been brought to a successful termination. This immense work, of the success of which people were beginning to despair, has given results never witnessed before. Kissingen is situated in a saline valley about 990

feet above the level of the Baltic. In the month of June, 1849, after seventeen years of work, the boring had reached a depth of 1820 feet, having previously passed through several strata of salt separated by masses of granite. There was then encountered, for the first time, a stratum of carbonic acid gas, followed by new granitic masses, and at length on the 12th of June a violent detonation overthrew, but without injury to any body, the scaffolding which covered the mouth of the well, and almost immediately there was seen issuing from the orifice a column of water, nearly five inches in diameter, which rose with prodigious force to the height of 100 feet, diffused itself on all sides like the branches of a magnificent palm tree, and thus formed the most extraordinary *jet d'eau* imaginable. The water, clear as crystal, issues from the soil at a temperature of 66° Fahr., charged with 3.4 per cent. of pure salt, and gives a volume of 40 cubic feet per minute. It is forced up by an atmosphere of carbonic acid gas acting with a force of fifty atmospheres. The total depth of the well is 2047 feet. It is calculated that this spring will yield annually about 293 tons of salt, which, deducting expenses, will add 30,000*l.* to the revenue of Bavaria.—*From Gazette Médicale, in Journal de Pharmacie, December, 1850.*

THE WATER SUPPLY OF LONDON.

Dr. Thomas Graham, Professor of Chemistry at University College, Mr. Miller, Professor of Chemistry at King's College, and Dr. Hoffman, Professor of the Agricultural College of Chemistry, have been appointed Commissioners to inquire into the qualities of the several waters now in use in the metropolis, and also the supplies proposed for the future. The Commissioners are instructed to test the chemical quality of the waters now in use, and also the water proposed to be supplied by the Board of Health from the Surrey hills and from Watford. They are also desired to give their opinion on the qualities of soft water generally, and whether its general use will be likely to be attended with any great amount of inconvenience to the public. In order that the inquiry may not be used for the purposes of delay, the Commissioners are requested to proceed at once to their investigation, and they are furnished with all the existing evidence on the subject, which is considered sufficient to enable them to come to a conclusion, in addition to their own chemical tests and analyses as applied to the quality of the several waters, and their applicability to general use.

UNIVERSITY OF LONDON.

M.B. SECOND EXAMINATION, 1850.—EXAMINATION FOR HONOURS.

Physiology and Comparative Anatomy.

Bristowe, John Syer (gold medal) } Equal { St. Thomas's Hospital.
Growse, Robert (Ditto) } Guy's Hospital.
Hewitt, William Morse Graily, University College.
Shearman, Charles James, University College.

Surgery.

Bristowe, John Syer (scholarship and gold medal), St. Thomas's Hospital.
Lewis, Robert Benson (gold medal), Leeds School of Medicine.
Growse, Robert, Guy's Hospital.
Shearman, Charles James, University College.
Hewitt, William Morse Graily, University College.

Medicine.

Growse, Robert (scholarship and gold medal), Guy's Hospital.
Shearman, Charles James (gold medal), University College.
Bristowe, John Syer, St. Thomas's Hospital.
Lewis, Robert Benson, Leeds School of Medicine.
Hewitt, William Morse Graily, University College.

Midwifery.

Hewitt, William Morse Graily, University College.

M.D. EXAMINATION, 1850.—FIRST DIVISION.

Baines, Matthew, King's College.
Barrow, Edward Enfield, Guy's Hospital.
Birkett, George, Charing Cross Hospital.
Carlill, John Burford, University College.
Eade, Peter, King's College.
Edwards, William Thomas, University College.
Elam, Charles, Leeds School of Medicine.
Monckton, Stephen, King's College.
Ransom, William Henry, University College.
Sankey, William Henry Octavius, St. Bartholomew's Hospital.
Wilks, Samuel, Guy's Hospital.

SECOND DIVISION.

Ayre, William, London Hospital.
Heale, James Newton, St. Thomas's Hospital.

DEATH FROM LOCK-JAW.

An inquest was held on Tuesday week, at Hurst, before Mr. Rupert Clarke, coroner, on the body of Aaron Lunnion, farmer, of that parish,

who died from lock-jaw, induced by a cut in the hand. The evidence showed that while assisting at a timber-cart, a tree overpowered deceased and two other men, and the hook of the chain, which was sharp, tore the inside of deceased's hand all across, and the wound bled very much. A woman named Metcalf, the village midwife, dressed the wound, and after applying bread poultice and marsh mallows for ten days, she altered the treatment and applied a salve made of bees' wax, lard, and salad oil. In a day or two after, however, she applied a little red precipitate powder to a portion of the wound where the flesh appeared to be dead. Deceased for some time would not consent to a surgeon being called in, but at length Mr. Waite attended him, on the day after the precipitate was put on his hand. The surgeon found him suffering from a sore throat and a stiffness in the back; in fact, symptoms of tetanus were apparent. Mr. Waite said he considered red precipitate an improper application to such a wound, as it was poisonous and would destroy flesh. The coroner summed up the evidence, and cautioned Mrs. Metcalf as to the great risk she ran by attending cases of this description, and recommended her not to undertake their care for the future. Verdict, "That death was caused by tetanus, produced by a wound in the hand."—*Oxford Chronicle.*

A deputation from the Convention of Poor Law Medical Officers, consisting of General Sir De Lacy Evans, M.P.; Mr. Jacob Bell, M.P., Mr. Hunt, representative of the Provincial Medical Association; Mr. James Stedman, Guildford, representative of the National Institute of Medicine, Surgery, and Midwifery; Dr. Wilson, Physician of St. George's Hospital; Dr. Hodgkin, Chairman of the Committee, Mr. Peter Martin, Reigate; Mr. William Cantrell, Wirksworth; Mr. E. Boulger, Bletchingley; Dr. Barnett, Mr. George Ross, Mr. J. T. Mitchell, Mr. William Lobb, Mr. John Liddle, Dr. Bainbridge, Mr. Edward White, Dr. Tripe, and Mr. C. F. J. Lord, Hon. Secretary, had an interview with Lord John Russell on Friday, the 31st Jan., at his official residence in Downing-street, in relation to an amended system of Poor Law medical relief. The report is given in another part of our Journal.

BOOKS AND JOURNALS RECEIVED.

Gazette Médicale de Strasbourg.
Gazette Médicale de Paris.
Medicines, their Uses, and Mode of Administration. Third Edition. J. M. Neligan, M.D.
Prostitution in relation to Public Health, by W. Acton, Esq.
Dublin Quarterly Review.
London Journal.
On the Existing State of our Knowledge of Vaccination and Revaccination, by Alexander Knox, M.D.
London Medical Directory.
London University Calendar.
Journal de Médecine, de Chirurgie, et de Pharmacologie, Bruxelles.
Gazette Médicale de Montpellier.
Notes of a recent Visit to several Provincial Asylums for the Insane in France, by John Webster, Esq., M.D., F.R.S.

OBITUARY.

Suddenly, at his residence, in Scarborough, where he had eminently practised, under the firm of Travis and Dunn, for nearly thirty years, deeply and sincerely lamented, John Dunn, Esq., surgeon, F.R.C.S., aged 59.

NOTICES TO CORRESPONDENTS.

Communications have been received from—
JAMES GLAISHER, Esq., F.R.S., Royal Observatory, Greenwich.
DR. SUTHERLAND, of Leamington.
THOMAS HERBERT BARKER, Esq., M.D., Bedford.
FORBES WINSLOW, Esq.
JOHN JACKSON, Esq., Stonefield-street, Islington.
SAMUEL SMITH, Weaverham, Northwich.
EDWARD DANIELL, Esq., Newport Pagnell.
THOMAS G. WALES, Esq., Downham.
WILLIAM LEY, Esq., Asylum, Littlemore, Oxford.
JOHN MORGAN, Esq., Waters Upton.
WILLIAM HART, Esq., Dorking.
MEDICO-CHIRURGUS, Romford,
To all of whom the Editors' best thanks are due.

To the Editor of 'The Institute.'

SIR,—A medical friend writes me, "I see by 'The Lancet' it is proposed to do something handsome for your old master, Professor Grant." Is this so? In what shape is it to be? I shall feel bound to add my mite, and perhaps, you will take the trouble to tell me how to proceed.

Yours,

MEDICO-CHIRURGUS.

Romford, Essex, February 4, 1851.

MEDICO-CHIRURGUS shall be replied to in our next.

METEOROLOGICAL TABLE FOR THE WEEK ENDING FEBRUARY 1, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Clinometer Barometer above the Level of the Sea.	TEMPERATURE OF AIR.				Mean elastic force of Vapour.	MEAN TEMPERA- TURE OF				Mean weight of Vapour in a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	Mean amount of Cloud, 0-10.	AUTHORITIES AND NAMES OF OBSERVERS.						
				Highest.	Lowest.	Range in the Week.	Mean of all the Highest.		Mean of all the Lowest.	Mean Daily Range.	Mean.	Evaporation.						Dew Point.					
Jersey.....	49° 11'	2° 6' W.	75	in. 29.713	in. 29.062	29.336	0.076	0.269	68.0	36.0	22.0	51.6	40.2	11.4	40.5	43.9	40.6	3.13	grs. 0.69	0.822	539.5	5.3	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey.....	49° 33'	2° 40' W.	123	29.573	29.005	29.207	0.688	0.285	62.0	38.5	13.5	45.0	42.2	5.8	45.1	43.9	42.3	3.32	0.34	0.910	538.7	7.1	Dr. Hoskins, F.R.S., M.B.M.S.
Truro.....	50° 17'	5° 4' W.	55	29.673	30.010	29.340	0.670	0.275	55.0	34.0	21.0	50.6	38.2	12.4	44.8	43.2	41.1	3.18	0.43	0.732	540.5	5.7	Dr. Barham.
Exeter.....	50° 45'	3° 41' W.	140	29.495	29.874	29.164	0.710	0.249	54.0	32.2	21.8	48.4	35.0	13.4	42.4	40.7	37.3	2.90	0.41	0.888	540.3	3.4	Dr. Shapter, M.B.M.S.
Uckfield.....	50° 58'	0° 5' E.	180	29.509	29.820	29.300	0.620	0.241	52.0	32.0	20.0	46.6	36.0	10.6	41.6	39.9	37.6	2.84	0.42	0.874	542.1	7.4	C. L. Prince, Esq., M.B.M.S.
Greenwich.....	51° 29'	0° 0' W.	100	29.498	29.854	29.077	0.777	0.239	53.5	34.3	19.2	46.4	36.7	9.7	41.1	39.3	36.9	2.80	0.40	0.873	541.7	—	From Reg-Gen. Report.
Lewisham.....	51° 28'	0° 1' W.	78	29.591	29.923	29.149	0.774	0.236	53.8	32.6	22.2	48.3	35.8	12.5	41.8	39.7	36.7	2.76	0.51	0.735	542.6	6.3	H. Gordon, Esq.
St. John's Wood.....	51° 32'	0° 1' W.	150	29.494	29.794	29.098	0.696	0.236	52.0	34.5	17.5	45.8	36.5	9.3	40.4	38.9	36.7	2.74	0.39	0.928	542.6	6.7	G. Leach, Esq., F.Z.S., M.P.M.S.
Cardington.....	51° 40'	0° 51' W.	250	29.320	29.603	28.970	0.638	0.267	56.0	32.9	23.1	47.2	35.8	11.4	41.5	40.9	40.3	3.10	0.17	0.949	537.5	6.5	Dr. Lee, F.R.S., Treas. M.P.M.S.
Norwich.....	52° 7'	0° 25' W.	100	29.534	29.874	29.170	0.754	0.236	52.2	31.7	20.5	44.5	34.4	10.1	40.6	39.0	36.8	2.77	0.39	0.875	542.9	6.5	S. C. Whitbread, Esq., F.R.A.S., Pres. D.M.S.
Nottingham.....	52° 37'	1° 16' E.	39	29.579	29.951	29.233	0.718	0.221	53.0	26.0	27.0	44.1	32.0	12.1	35.9	37.3	35.0	2.59	0.39	0.870	547.4	6.9	W. Brooke, Esq., F.R.A.S., M.D.M.S.
Ilkerton.....	52° 58'	1° 10' W.	103	29.430	29.764	29.098	0.666	0.215	52.0	25.2	26.8	44.4	31.2	13.2	37.6	36.2	34.1	2.54	0.33	0.885	544.2	5.0	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.
Walsley.....	53°	3° 0' E.	260	29.239	29.597	28.933	0.664	0.214	55.1	29.0	26.1	44.4	32.9	11.5	39.3	37.1	33.9	2.49	0.53	0.827	539.4	6.9	Dr. Moffatt, F.R.A.S., M.B.M.S.
Stonyhurst.....	53° 41'	1° 30' W.	115	29.425	29.742	29.013	0.629	0.215	49.5	28.0	20.5	44.6	33.1	11.5	38.6	36.8	34.2	2.53	0.44	0.856	545.6	6.6	W. R. Milner, Esq., M.B.M.S.
Whitehaven.....	53° 31'	2° 28' W.	381	29.119	29.420	28.825	0.595	0.217	51.0	22.6	28.4	43.2	31.1	12.1	37.3	36.1	34.4	2.54	0.29	0.903	538.5	6.8	Rev. A. Weld, F.R.A.S., M.B.M.S.
Wharfedale.....	54° 35'	3° 25' W.	90	29.382	29.732	29.152	0.580	0.234	50.0	31.0	19.0	42.9	37.3	5.6	39.2	38.1	35.4	2.73	0.28	0.910	541.5	—	J. F. Miller, Esq., F.R.S., M.B.M.S.
Glazow.....	55° 51'	4° 18' W.	121	29.304	29.576	29.036	0.480	0.221	51.0	30.7	20.3	44.7	34.3	10.4	40.2	38.0	34.8	2.57	0.54	0.827	539.0	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.
Dunino.....	56° 16'	2° 49' W.	250	29.058	29.340	28.510	0.530	0.216	48.0	30.0	18.0	40.7	32.7	8.0	37.4	36.1	34.2	2.52	0.31	0.893	537.9	4.7	David Tennant, Esq., M.B.M.S.

The remarkable difference in the ranges of temperature at Jersey and Guernsey is again shown, and Dr. Hoskins remarks that "The great difference in the mean daily range between this place and Jersey is no less true than strange. I have long been aware of the difference of climate in these near neighbours; Jersey partakes more of a continental climate than we do."

The highest readings of the thermometer in air were 58° at Jersey, 56° at Hartwell, and 55° at Truro. The lowest readings were 22° at Stonyhurst, 25° at Nottingham, and 26° at Norwich. The least daily

ranges of temperature took place at Whitehaven, 5° 6', at Guernsey 5° 8', and at Dunino 8°; their mean value is 6° 5'; and the greatest occurred at Exeter, 13° 4'; at Nottingham 13° 2', and at Lewisham 12° 5', and their mean value was 13°.

Rain fell on every day at Truro and Exeter. The largest falls were 2.02 in. at Truro, and 1.88 in. at Guernsey. The least falls took place at Norwich, 0.32 in., and at Nottingham, 0.38 in.

The next Table shows the average results for different parallels of latitude.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Feet.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Readings of the Thermometer.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.
																		General Direction.	Average Strength.	Average number of days it fell.	Average fall.	
Jersey and Guernsey.....	99	49.22	° 49'	in. 29.646	0.277	85.0	37.3	17.7	49.8	41.2	45.8	43.9	41.5	gr. 0.323	0.52	0.866	539.1	SW. SW.	2.2	6	1.38	6.2
Truro and Exeter.....	98	50.31	° 50'	29.584	0.262	84.5	38.1	24.4	49.5	36.6	43.6	42.0	39.7	0.344	0.44	0.875	540.4	SW. SW.	2.2	7	2.29	4.6
Uckfield and Hartwell.....	164	51.19	° 51'	29.482	0.244	83.5	38.3	20.2	46.9	36.2	41.3	39.7	37.2	0.358	0.38	0.894	541.3	SW.	1.1	5	0.96	6.7
Cardington and Nottingham.....	81	52.84	° 53'	29.511	0.224	82.4	39.5	23.5	45.3	32.5	39.0	37.5	35.4	0.371	0.27	0.878	540.0	SW.	6	6	0.36	6.1
Stonyhurst and Whitehaven.....	195	53.55	° 54'	29.250	0.225	80.4	36.8	24.8	43.1	34.2	38.3	37.1	35.4	0.383	0.30	0.905	540.0	SSW. SW.	2.4	6	1.70	6.8
Glasgow and Dunino.....	186	56.4	° 56'	29.181	0.219	49.5	39.4	19.1	42.7	33.5	38.8	37.1	34.5	0.43	0.43	0.890	538.5	SSW. NW.	1.9	6	0.94	4.7

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

At JERSEY, the mean temperature of the month of January was 46 deg., and which is remarkably high. The fall of rain for the month has been 3.82 in. The crocus and garden anemone were in flower on the 29th; the daffodil on the 30th, and the pastures afford an excellent bite for the cattle.

At GUERNSEY, January 26, the morning was showery, and the afternoon was stormy; the morning of the 27th was fine, the evening was stormy, with rain falling; the 28th was overcast, the night was stormy with thunder and lightning; on the 30th there was a moderate gale; there was a hail storm on the 31st; and February 1 was showery; the night was stormy. Broccoli abundant during 1st week of January, 1851.

At TRURO, January 26th was overcast, the night was wet and stormy; rain was falling frequently on the 27th, 28th, and 29th; on the 30th, there was hail, and lightning at night; hail fell on the morning of the 31st, and the day and night were showery. The morning of February 1st was fine, and the wind was E. of north for the first time for many weeks.

At UCKFIELD, January 26th was overcast, rain was falling during the evening and night. The 27th was fine, showers of rain at night; the 28th was fine till the night, which was stormy; the 29th was overcast, stormy, with rain at night; on the 30th, there were showers of rain and hail; very heavy rain with a gale of wind at night; the 31st was overcast, and on February 1st the sky was overcast, and the day was cold. At 10 p.m., on the 27th, a very large orange coloured meteor appeared near the Pleiades, and passing between Alpha and Gamma Cassiopeia, exploded in beautiful streams of light near Beta Cephei. The following flowers have come into bloom during the week:—pulmonaria officinalis, cynoglossum officinale, anemone, fragaria sterilis, vinca major variegata, corylus avellana, bellis perennis, hepatica triloba.

At GREENWICH, the reading of the barometer decreased from 29.83 at the beginning of the week to 29.08 on the 31st, and increased to 29.38 by the end of the week.

At ST. JOHN'S WOOD, the weather was generally fine on the 26th, 27th, and 28th; on the 29th and 30th the wind was high; some snow fell on the morning of the 31st. On February 1st, the sky was bright till noon, and the night was fine.

At HARTWELL, the 26th was cloudy; there was a frost on the 27th, which day was fine till the night, when there was a violent storm of wind and rain. Rain fell frequently on the 28th and 29th; there was frost on the 30th, with violent wind and rain; the Chiltern hills were covered with snow. The zodiacal light was visible on the 27th.

At CARDINGTON, the 26th was hazy; the 27th was clear with sunshine, hoar frost at night; the 28th was mild; the 29th was cloudy and mild; lightning was seen at night, at short intervals, in a W.N.W. direction; the morning of the 30th was cloudy; the sky was clear at noon, overcast, and rain at night; there was sleet in the morning of the 31st, and on the night of February 1st.

At NORWICH, the 27th was fair, and almost cloudless all day; on the 28th, rain in the early part of the day, afternoon fair, and rain at night; the 29th was partially clouded in the morning, afternoon rain, and wind at night; the morning of the 30th was overcast; afternoon and evening, rain. Rain in the morning of the 31st; rest of the day clouded; on the 31st, there was thick rain, and sharp frost in the morning; frosty air all day.

DAILY DIRECTION OF THE WIND AND FALL OF RAIN.—

Names of Stations.	JANUARY.						FEB.	RAIN.		
	26	27	28	29	30	31	1	Fall in the week	Fall from 1st Jan.	No. of days it fell from Jan. 1.
Jersey	S. ... S.E.	N.W. 0.03 W.	W. 0.18 W.	N.W. 0.26 S.W.	N.W. 0.21 S.W.	S.W. 0.25 S.E.	S.E. ... S.E.	in. 0.93	in. ...	...
Guernsey	S.W. 0.59	S.E. 0.49	S. 0.29	W. 0.50	W. 0.36	W. 0.43	N. 0.26	2.92	10.15	32
Truro	S. 0.39	S.E. 0.23	W. 0.20	W. 0.15	W. 0.36	W. 0.23	N.E. 0.10	1.66	6.77	27
Exeter	S. 0.22	W. 0.12	W. 0.20	W. 0.20	W. 0.64	W. 0.12	N. ...	1.50	4.41	21
Uckfield	S.E. ...	W. 0.01	W.S.W. 0.04	W.S.W. 0.07	W.S.W. 0.22	S.W. 0.37	N. 0.06	0.75	2.88	21
Lewisham	S.E. ...	S.W. 0.01	SS.W. 0.05	S.W. 0.05	S.W. 0.12	S.W. 0.12	N. ...	0.75	2.95	17
Greenwich	S.E. ...	S.W. 0.06	SS.W. 0.12	SS.W. 0.21	S.W. 0.34	S.W. 0.12	N.E. 0.06	0.91	3.59	20
St. John's Wood	S.E. ...	S.W. ...	S. 0.01	S. 0.09	S. 0.16	S. 0.24	N.E. 0.41	0.91	2.80	16
Hartwell	S.E. ...	W.S.W. 0.03	S.W. 0.09	S.W. 0.13	S.W. 0.11	S.W. 0.02	NN.W. ...	0.38	2.16	14
Cardington	S. ...	S.W. 0.02	S.W. 0.04	S.W. 0.04	S.W. 0.05	S.W. 0.17	S.W. ...	0.32	2.11	19
Norwich	S.E. ...	S.W. 0.03	S.W. 0.09	S.W. 0.13	S.W. 0.11	S.W. 0.02	NN.W. ...	0.38	2.16	22
Nottingham	S.E. ...	W. 0.20	S.W. 0.40	W.S.W. 0.10	S.W. ...	S. 0.05	N. 0.10	0.85	3.25	18
Hawarden	E.S.E. 0.41	S.W. 0.16	S. 0.33	SS.W. 0.41	S. 0.67	S. ...	E.S.E. NN.W.	...	1.98	6.59
Stonyhurst	E.S.E. 0.16	S. 0.08	S. 0.04	S. 0.11	S. 0.02	S. ...	W. N.W.	0.02	0.43	1.77
Wakefield	S. 0.14	W.S.W. 0.15	S. 0.08	SS.W. 0.24	S. 0.07	E. 0.74	N. ...	1.42	9.71	28
Whitehaven	N. 0.11	N.E. 0.40	S. 0.10	S. 0.20	W.S.W. 0.28	N.E. 0.10	N.W. ...	1.19	7.02	28
Glasgow	S.E. 0.05	S.W. 0.03	SS.W. 0.10	SS.W. 0.50	W. ...	N.W. ...	N.E. 0.01	0.69	4.26	21
Dunino										

The fall of rain at some places is remarkable. The fall of rain at Whitehaven in the month just ended, is 9.422 in., being 5.318 in. above the average quantity for January, which is 4.05 in., and a greater depth than has been measured in any month of any year since 1831, and probably for a much longer period. The falls which approach the nearest to January, 1851, are, December, 1833, 9.048 in., January, 1834, 9.169 in., and July, 1846, 9.061 in. These are the only months during the last twenty years which approach January, 1851, in point of wetness.

At NOTTINGHAM, there was white frost on the 27th, and zodiacal light was bright at intervals; the 29th was fine; snow fell on the 30th; and there was

frost on the 31st, and on February 1st. Periwinkle (vinca minor) in flower. The clothes moth (tinea pellionella) flying about. The highest reading of the thermometer in the sun was 68 deg. on February 1st; the greatest cold on the grass was 19.8 deg. on February 1st, and the amount of evaporation was 0.29 in. in the week.

At WAKEFIELD, a little sleet was mingled with the rain which fell on the 26th. During the greater part of the week the wind oscillated about the south, blowing from points to the east and west of south alternately, but rarely from the south directly.

At STONTHURST, the 26th, morning, rainy and cold; afternoon, slight snow and rain. The 27th, stormy, hail, and rain, clouds broken, sunny and fine at intervals. The 28th, rain at night, generally fair during the day, rain in the evening. The 29th, overcast, great deal of rain at intervals during the day. The 30th, hail and snow during the night and morning; rain in the evening. The 31st, ground covered with snow, fine, bright; and February 1st was fine, bright frost in the morning, aurora borealis in the evening.

At WHITEHAVEN, the weather during the past week has been characterized by strong winds and heavy rains, the winds manifesting great unsteadiness. On the night of the 30th, 0.744 in. was deposited in the form of snow and hail, which nearly all melted as it fell, but a small portion remained on the ground till the night of the 2nd February.

At DUNINO, the 26th, 27th, and 28th were dull and damp. There was a heavy squall of wind and rain from the S.W. on the 29th. The 30th and 31st were frosty. Aurora borealis was seen on February 1st.

At JERSEY, I hear of no prevalent diseases. The island is generally healthy.

At GUERNSEY, measles and mumps disappearing. Scarlatina more frequent, mild; severe only in low damp houses of the poor—among ill-fed, neglected children. No other prevailing complaint, except epistaxis in persons between 70 and 80 without assignable cause.

At TRURO, the town is in a generally healthy state. There is also less fever in the country around.

At EXETER, no prevailing disorder; district generally healthy.

At UCKFIELD, typhus, scarlet fever, and hooping cough have become very prevalent during the past week.

At ST. JOHN'S WOOD, influenza, bronchitis, and rheumatism are still prevalent; as, also, scarlatina, small-pox, and measles; the latter is on the decline. A few cases of erysipelas and acute inflammatory affections have occurred during the week.—S. H. ROBERTS.

At BEDFORD, no prevailing epidemic.—T. H. B.

At NORWICH, the general state of health in the city is improved. Influenza is the prevailing disease at present.

At NOTTINGHAM, influenza and obstinate dyspepsia are prevalent; and typhus in the surrounding villages.

At WAKEFIELD there has been no marked prevalence of any disease, except slight catarrhal attacks.

During the month of January, there were 810 new cases of disease, as follows:—

Abscess.....	13	Erysipelas	11	Pericarditis.....	1
Ague	—	Fever	55	Pleuritis.....	4
Aphthæ	1	Gastritis	11	Phlebitis.....	4
Apoplexy.....	—	Gonorrhœa	10	Phrenitis.....	4
Asthma	13	Gout	4	Phthisis.....	8
Boil	14	Hæmorrhage	13	Pleuritis.....	3
Bronchitis	38	Hæmorrhoids	3	Pneumonia.....	4
Cancer	2	Heart Disease.....	8	Purpura	—
Catarrh.....	63	Hooping Cough	26	Quinsy.....	16
Chicken Pox	3	Hydrocephalus	—	Rheumatism.....	40
Cholera.....	1	Hysteria	7	Roseola.....	—
Convulsions.....	4	Influenza	31	Scarlatina.....	1
Croup	3	Insanity	1	Serofula.....	13
Delirium Tremens.....	3	Kidney Disease	3	Skin Diseases	25
Diabetes	—	Laryngitis	1	Scurvy	1
Diarrhœa	60	Liver Disease	14	Small-pox	—
Dropsy	5	Measles	3	Syphilis	6
Dysentery	7	Mumps	1	Teething.....	8
Dyspepsia.....	109	Nettle Rash.....	1	Tetanus.....	1
Enteritis	8	Neuralgia.....	41	Uterine Disease	23
Epilepsy	4	Ophthalmia.....	15	Unclassed cases	43

Mr. Milner remarks that he has received returns from a larger number of medical gentlemen this month, therefore the number of cases recorded does not represent any absolute increase of disease.

At DUNINO.—This locality is exceedingly healthy; there have been a few cases of inflammation of throat.

At STONTHURST, severe colds, with bronchial affections, have been common in the neighbourhood.

The more seasonable weather which seemed to have set in at the end of the preceding week, was of short duration; on the 27th the temperature was about its average value; and on the 29th, at nearly every place, the reading of the thermometer exceeded 50 min., and the temperature was nearly 11 deg. above its average value for the day, after this it declined till on February 1st, it was again about its average. The weather during the week has been for the most part bad, and rain has been falling generally at all parts of the country.

On the 26th, the air was somewhat heaped up over the centre of England, where the reading of the barometer at the level of the sea was 29.95, whilst both North and South of this parallel, it was about 29.75. On the 27th it was 29.62 North of latitude 53 degs., and it was 30.02 South of this parallel. On the 28th it was 29.55 North of latitude 53 degs., and 29.94 South of that parallel. On the 29th it was 29.29 North of 53 degs., and it was 29.89 South of it. On the 30th it was 29.25, in latitude 54 degs.; was 29.63 between the latitudes of 51 deg. and 53 deg., and was 29.81 South of this parallel. On the 31st in the same parallels, the readings were 29.19, 29.30; and 29.45 respectively. At 9 a.m., during the first three days of the week, the difference of temperature at one place and another, was about 15 deg., the lower readings being usually about latitude 52 deg., and the highest at Guernsey and Cornwall. On the last four days the difference was less than 10 deg., the difference being chiefly caused by the increased temperature in the middle of England.

JAMES GLAISHER, F.R.S.,

Secretary of the British Meteorological Society.

ERRATA in the Meteorological Table for the week ending January 25.

At Truro, the amount of rain fallen, for 0.22 read 1.56.

At Stonyhurst, the amount of rain fallen, for 1.37, read 1.45.

In the remarks following this Table, for the least falls took place at Truro, &c., read at Cardington 0.26, and Wakefield 0.33 in.

In second line of second Table, average fall of rain, for 0.34, read 1.57.

At Stonyhurst, in Table on page 99, January 25, for 0.50, read 0.05.

ADVERTISEMENTS.

MESSRS. LANE AND LARA, MEDICAL AGENTS, 14, JOHN STREET, ADELPHI, have always for disposal Practices, Partnerships, and such Businesses as are usually carried on by Professional men of all kinds, in every locality.

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Extracts and Editorial Note from the New York Journal of Medicine.

March 1st, 1850.

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From the Medical Examiner and Record of Medical Science, for May, 1850, published in Philadelphia.

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"Army Medical Department, January 16, 1847.

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"Deputy Inspector-General of Hospitals.

"Mr. T. B. BROWN, Druggist,

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1st. To create a higher tone in the public mind towards the Medical Profession, without compromising its honour, standing, or liberal character, and to secure the more regular payment for professional services from that large class of Society who possess the means, but not the disposition, to remunerate Medical Men.

2nd. To establish a Fund, to be devoted to the erection and support of a College for the Education of the Children, Orphans, or otherwise of Medical Men, and also for the reception of Distressed Members of the Medical Profession or their widows.

3rd. To negotiate the Transfer of Practices, Partnerships, and for the provision of Assistants.

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Particulars to be obtained from the Secretary.

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(FROM DR. GOLDING BIRD.)

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"I have now, for some time, employed pretty largely the triple compound of Iodine, Quinine, and Iron, prepared by Mr. J. T. Davenport in the form of syrup; I do not hesitate to express my opinion of its great value as a therapeutic agent. It has appeared to me, that the Quinine assisted the assimilation of the Iron, and I have found it to be of very great value in cases in which the use of the Iodide of iron is recognised. This triple compound possesses many advantages over the simple Iodide, and not the least of them is the satisfactory manner in which it is tolerated by the stomach, especially if administered (as all preparations of Iron ought to be) immediately after a meal.

"GOLDING BIRD, A.M., M.D., F.R.S.,
Fellow of the Royal College of Physicians,
Physician and Professor of Materia Medica at Guy's."

(FROM DR. GEO. P. MAY.)

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Credit is allowed for half the Annual Premium for the first five years.

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Age when Assured.	Amount Assured.	Annual Premium hitherto paid.	Reduction of 30 per Cent.	Annual Premium now payable.
	£.	£. s. d.	£. s. d.	£. s. d.
20	1000	20 17 6	6 5 3	14 12 3
30	1000	25 13 4	7 14 0	17 9 4
40	1000	33 18 4	10 3 6	23 14 10
50	1000	48 16 8	14 13 0	34 3 8

14, Waterloo-place,
10th May, 1850.

A. R. IRVINE, Managing Director.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 7.

LONDON, SATURDAY, FEBRUARY 15, 1851.

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For affections of the LIVER, KIDNEYS, JAUNDICE, INDIGESTION, CUTANEOUS AFFECTIONS, and CONSTIPATION, these preparations have long been prescribed by the most eminent of the faculty with the best results.

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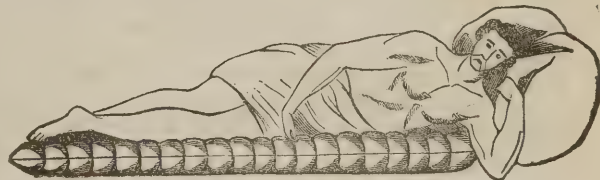
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			£	£	£	£ s. d.	£ s. d.
213	His Majesty William IV.	14	3,000	1,068	4,068	35 12 0	2 10 10
69 & 92	His R. H. the Duke of York	7	5,000	962	5,962	19 5 0	2 15 0
1,458	Mrs. N. Hyde	20	400	284	684	71 0 0	3 11 0
5,610	Admiral Sir W. Sidney Smith ...	8	1,700	324	2,024	19 1 2	2 7 8
3,422	The late Duke of Argyll	14	5,000	1,453	6,453	29 1 2	2 1 6
3,604	The late Earl of Clarendon	13½	2,500	1,120	3,620	44 16 0	3 6 4
687	M. S. (Berks)	21	400	437	837	109 5 0	5 4 1
1,578	Rev. Thomas Crompton	20	500	350	850	70 0 0	3 10 0
7,828	William Gilles, Esq.	8½	500	197	697	39 8 0	4 12 9
756	George Jones, Esq.	21	5,000	3,754	8,754	75 1 7	3 11 6
1,915	Sir John S. Sebright, Bart.	25½	5,000	3,980	8,980	79 12 0	3 1 10
1,120	Nicholas Doidge	28	100	126	226	126 0 0	4 10 0
1,010	Rev. F. W. Blomberg, D.D.	28	3,000	3,596	6,596	119 17 4	4 5 8
6,059	Rev. Richard Tillard	18½	1,000	814	1,814	81 8 0	4 9 2
6,630	Ditto	16½	1,000	773	1,773	77 6 0	4 12 2
782	Mrs. Sarah Cope	33	1,000	938	1,938	93 16 0	2 16 10
5,073	James Price	21	200	208	408	104 0 0	4 19 0

Persons assured for the whole term of Life, for £100 and upwards, in Great Britain or Ireland respectively, will be entitled at the end of every FIFTH YEAR (INSTEAD OF EVERY SEVENTH YEAR AS HERETOFORE) to participate in the Surplus Premiums, either by ADDITION to their Policies, or an EQUIVALENT REDUCTION will be made in the future payments of Premium, at the option of the Assured.

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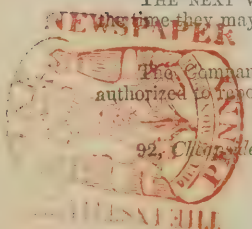
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HENRY DESBOROUGH, SECRETARY.

92, Cheapside, August 1850.



LECTURES.

LECTURES ON THE GERMAN MINERAL WATERS

DELIVERED AT

THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

Physician to the German Hospital.

LECTURE VIII.

ISCHL—TEPLITZ

GENTLEMEN.—Having remained a sufficient length of time in Gastein, you will leave at five in the morning by the diligence, to return to Salzburg. On arriving at Hallein, the last stage before reaching Salzburg (at about half-past five p.m.), I would advise you to stop and inspect the interesting salt works. I find in my journal, "We had to ascend a high mountain, when the guide, for the purpose of shortening our route, led us by a foot-path where narrow planks bridged over precipices, which were really frightful to contemplate, from the unsafe footing at several spots. The guide walks before with a steady step (for the planks will not admit of two persons abreast), and though he assured me, that ladies even frequently choose this unsafe bridge of planks, I apprehend that they must have been deceived by the guide, who merely asks, whether a shorter way would be preferred, without informing the unwary passenger of the imminent peril he has to encounter, for the mere purpose of saving a few minutes. The guide advises you to hold fast by him, and to look upwards, in order to prevent giddiness, for one false step might hurl you down a fearful abyss. I confess that I was very indignant at the deception practised on me, but after about ten minutes, the depths below me gradually decreased, and I thanked my stars for a safe arrival at the saltworks. A miner's white dress was put by some official over my clothes, and I was then conducted down the shafts. These are passages hewn out of the salt rocks, and supported by wood; moist and damp at the entrance, but becoming dry as you descend deeper. Though they are extremely long, the air is excellent, and not the slightest oppression or inconvenience in breathing is felt, all the main shafts being so constructed as to admit the fresh air freely. At last we arrived at the principal excavation, with a lake of salt water in the centre, forty feet long, thirty wide, and seven feet deep, illuminated by numerous lamps, which beautifully reflected their rays in the still water, and formed certainly a very agreeable contrast with the darkness, out of which we had just emerged. The guide stamped on the ground, and a boat approached from the centre of this subterranean vault. We stepped in, and were drawn to the other side very agreeably. It was explained to us, that sweet water is conducted into the reservoir, up to the ceiling, where it soon saturates itself with salt (absorbing $26\frac{1}{2}$ per cent.), and precipitates argilla. The ceiling becomes gradually excavated, and the water collects in the lake, which is exhibited to the curious in summer, but boiled in winter for the formation of salt. I was shown very curious kinds of salt rocks, found in the 'saline' at different periods, and some other antiquarian curiosities. We returned to the upper world by a long passage, the walls of which consisted not of salt rocks, but of lime-stone; they were damp, and of an acid smell.

"We had to sit across a bench, and were then drawn out at a very rapid pace by a man in front. The passage was so narrow as to leave no spare room. The galloping and clattering made me sometimes fancy in the half darkness, that a real horse was dragging me along at this furious pace, till I recollected the narrowness of the passage, which did not allow the slightest alteration of position without the greatest danger of being crushed. Although what I saw was very interesting, still I did not feel altogether satisfied, from not having witnessed the preparation of salt in its various stages." In about an hour and a half's ride you arrive at Salzburg. Thence the diligence unfortunately leaves at 7 p.m. for Ischl, so that you are deprived of the opportunity of admiring the scenery. You pass through Hof and the pleasant village of St. Gilgen, lying on the Aber- or Wolfgang-Lake. Having driven for some time along its banks, you arrive at Ischl about three in the morning, with the chance of not finding accommodation till the inhabitants have shaken off their slumber, all the hotels being over-filled with visitors, particularly if the court happens to be at the place. The ups and downs you have had to experience in theeilwagen, sufficiently indicate the mountainous character of the road. Ischl lies in a romantic valley at the foot of the Noric Alps. You see in the immediate neighbourhood the Hallstätter Lake in the south, the Kammer Lake in the north, and the Mond Lake in the west. To the right of Ischl you see the

river Traun pursue its northerly direction, to be filtered through the Traun Lake in the north-east. Ischl forms just the centre of the Salzkammergüt, and, though upwards of 1,400 feet high, its climate is very mild, from the protection against north winds and violent changes afforded by the surrounding mountains. Comparison with the temperature of Vienna* showed the difference to be only one degree of Reaumer. The romantic valley is intersected by the rivers Traun and Ischl. From Schmalnauer's garden, situated on an eminence on the other side of the Ischl river, you enjoy a beautiful view of the surrounding mountain-peaks, with the snow-covered towering Dachstein in the back ground. The Calvarien mountain is another promenade, where you will be rewarded for your ascent by the views from the portico of the chapel at its summit. It is altogether a very charming place, with about 2,000 inhabitants, almost as much frequented for pleasure and recreation, as by invalids for the restoration of health. The salt mountain, from which the "soole" is obtained, lies at some distance, nearly 3,000 feet above the level of the sea. The drinking water is obtained from mountain springs, arising under lime-stone, and conducted in pipes to Ischl; it is very pure water, notwithstanding the superabundance of salt which exists in the locality. The chief virtue of the spa consists in the "soole" baths, taken in the new "badhaus" in single baignoires, where portions of "soole," added to warm baths of ordinary water, are frequently prescribed. Here, again, you see all possible contrivances to meet the various contingencies of different maladies. Ischl has only been in repute about thirty years, as a mineral watering place, and I might also say was created a spa by the self-sacrifice, exertion, and munificence of the late Dr. Wirer, who spent a large fortune in accomplishing the beautiful arrangements, all tending to one purpose. The "soole" derived from the salt works contains in sixteen ounces—

223 grains of chloride of sodium,
0.78 of chloride of calcium,
7.10 of chloride of magnesium,
4.85 of sulphate of soda,
1.02 of sulphate of lime,
1.82 sulphate of magnesia.

Total, 238.591 grains.

A cold sulphur spring, with a strong smell of sulphuretted hydrogen, but with an undetermined quantity of the gas, is found at the place, but is little used by itself. It possesses sixty grains of solid constituents in sixteen ounces, viz., $44\frac{1}{2}$ chloride of sodium, $12\frac{1}{2}$ sulphate of soda, $1\frac{1}{2}$ sulphate of magnesia, 1 and 1-10th sulphate of lime, nearly one grain of carbonate of magnesia, and about 1-5th of carbonate of lime. Now, let us just review what elements Ischl possessed, thirty years ago, for combating chronic diseases? Nothing but a healthy climate and abundant salt works. Into how many remedies did the energy and perseverance of one mind transform the above meagre enumeration? Now you have, beside the salt baths referred to, douche, rain, and vapour baths.

The boiling salt-water is used medicinally as a saline vapour bath. Then you find black moor baths (containing, among other ingredients, phosphate of iron); then, again, there are the saline mud-baths. These two are either used separately or mixed. There is also a swimming-school erected for sanitary purposes. The mountain herbs are employed in the preparation of a sort of whey, very agreeable to the taste. On the promenade, the visitors will be observed to stop, from time to time, at a certain stall, and quaff their morning beverages; and you will perceive the greatest number of drinkers receive the recently prepared whey, brought fresh from the Calvarien mountain. But you will find a goodly number of other bottles standing ready for the numerous patients. These are imported mineral waters. Thus, whilst one patient uses soole-baths, with whey, for obstruction of the lymphatic glands, another takes mud-baths, and drinks Carlsbad sprudel or Marienbad kreuzbrunnen, for some gouty affection of the lower extremities, or engorgement of the liver. Ischl is very much resorted to by the fair sex, and has a great reputation in swelling and incipient induration of the ovaries, if not of a malignant character; also in slighter degrees of hepatic enlargements; sluggishness of the liver, with habitual constipation, and scrofulous diathesis; luxatio spontanea of children is especially expatiated upon as a disease most frequently removed here. Poultices of mountain mud † are often employed in caries, and, it is alleged, with great advantage. The moor-ground is found at the distance of about half-a-league from Ischl, and baths are either taken

* Which lies about 900 feet lower.

† That portion of humus which precipitates in the salt mountain during the formation of the salt, chiefly consisting of argilla, sulphate of lime, sulphate of soda, &c.

there or the moor is carried to the bath-house, and administered in contractions from wounds or chronic gout, alone or mixed with mud, or with mother-lye of the "soole," or with the water of the sulphur-spring. There is also an establishment for gymnastic exercises. The mountain strawberries are occasionally ordered to be taken at regular intervals for medicinal purposes. The variety of adjuvants called into requisition at this spa will probably induce you to question the efficacy and remedial powers of the water; but if we consider the various morbid dispositions resorting to the spa, we need not wonder that the bracing mountain-air, together with the beauty and sublimity of the landscape, should augment the vital powers and counteract morbid tendencies. The acknowledged efficacy of saline baths in certain diseases of the lymphatic and sero-fibrous system, and in obstructed circulation, would indicate that in all such cases these baths might be appropriately resorted to. The late Professor d'Outrepoint, of Wurzburg, mentions the following case of a lady, whom he sent to Ischl. About the period of puberty she was bitten on the left breast. Some hæmorrhage, ensued with inflammation, but as from a feeling of timidity she neglected to disclose the accident, induration ensued. She married after some years, and enjoyed perfect health with the above exception. No progeny resulting from the union, the sterility was thought by the husband to be connected with the mammary disease, and therefore many remedies and baths were employed for its cure. Extirpation was recommended amongst others, but was not consented to by the patient, because she had suffered no pain from the enlargement. Sixteen years after her marriage Professor d'Outrepoint was consulted. He found the left mamma considerably enlarged, the skin very white, and the induration consisting of five different moveable tumours. These tumours had given her no pain for many years, nor had they increased in size. There was no trace of scrofulosis, all the glands were in a perfectly healthy condition, and none of the family had ever suffered with a similar disease, so that the mechanical lesion could alone be the cause of the evil. Iodine having been already administered internally and externally to no purpose, the Professor recommended her to go to Ischl. After three months she returned cured, the tumours had entirely disappeared, whilst the healthy breast had not diminished in size. He would not decide whether the cure was due to the poultices of mountain mud and moor rubbed into a fine dough with mother-lye, or to the "soole" baths employed. Another analogous case is related by the same authority, of a young man who injured one testicle by a hook on putting on his boots. The testicle swelled to the size of a goose-egg. After numerous remedies extirpation was advised, but the patient would not consent, as he had suffered no pain. The generative functions were not impeded, the patient having become the father of several children. Fifteen years after, the Professor saw him and found the testicle quite hard, but not painful; seminal cord and epididymis perfectly healthy; the scrotum tense, thin, and reddish. The right testicle was healthy. Neither the inguinal nor submaxillary glands were affected. He had never suffered from scrofulosis, and was quite healthy in every other respect. This patient was also sent to Ischl, and returned cured after ten weeks, but the affected testicle had become atrophied. On a future occasion I shall communicate some very interesting reports, kindly sent by the eminent physician of the establishment, Dr. Brenner von Felsach; but for the present let us proceed on our journey. A kind of omnibus leaves at ten in the morning, and takes you in two hours to Ebnsee. Here a steam-boat is in readiness to take the passengers over the Gemünder or Traun lake. In fine weather you will be pleased with the prospects offered on the water. The passage lasts about an hour. At the mouth of the Traun you perceive the village of Langbath; farther on, and on the right side of the lake, the perpendicular wall of the Traunstein (3,000 feet high) is seen; while on your left lies the village of Traunkirchen, built on a sort of isthmus projecting into the lake. Lastly, you pass the chateau of Orth, situated on a small island, and ultimately land at the little town of Gmünden.

Here, after taking refreshment, you avail yourself of a horse-railroad. Starting at a quarter past three, you arrive at Linz (nine German miles—about forty-five English) in six hours.

From this town, which is situated on the right bank of the Danube, you travel by steam-boat to Vienna. Starting at seven in the morning, you arrive at Vienna at four P.M., a distance of about thirty-six leagues. If you wish to pursue your northward course, and leave the visit to Baden for a future opportunity, the railroad affords you this facility, for it starts at half-past seven in the evening, and brings you to Prague, on the Moldau,* in sixteen

hours. After some little delay, the railroad carries you nearer still to your destination, viz., to Lobositz.† This place is situated on the Elbe, and the journey of about forty-five miles is travelled in three hours. The best Bohemian wine is grown in this neighbourhood. We are now within about fifteen miles of Teplitz. A sort of omnibus is in waiting for the railroad travellers alighting here, but I would advise you rather to avail yourselves of the diligence, as the omnibus is very slow. The "Paschkopole" is pointed out to you, a pass between the Mileschauer and Kletschen mountains, formerly notorious for the many highway robberies committed. The approach to the spa is very striking. After having driven for some time through ordinary fields and plains, your attention is suddenly arrested by the gentle undulations of the scene. The view of distant mountains covered with a lively green, promises to afford you purer air and a more cheerful locality. You are not deceived. The scenery augments in variety and interest, and every object silently informs you, that, from the comparatively barren and unfavoured regions, you have arrived at one of nature's favourite localities.

At about half-past seven you enter Teplitz, having completed the immense distance from Vienna in exactly twenty-four hours. It is situated about 51° latitude, and 14° eastern longitude, in the Leitmeritzer Kreis (circle) at the north-western extremity of the middle mountains, and at the south of the Erz mountains, in a fertile and charming valley. You see on this local map‡ the mountainous semi-circle at the north-west and south-east. Its elevation over the North Sea is 648 feet. You see Aussig on the Elbe only 10 miles to the east, Brux at an equal distance to the south-west. Nearer you see Bilin in the south, nearer still Dux. Somewhat more southerly, you perceive at the western extremity, below Brux, Püllna, so well known for its bitter water. If a line is drawn to the east, you meet with Seidlitz, the salts of which are supposed to be imitated under the form of Seidlitz powders; and very far east Seidschütz, which holds an intermediate rank between the said two bitter waters, as regards medicinal power. Dresden on the Elbe lies about forty miles to the north, Prague about sixty to the south. The village of Schönau, to the north of Teplitz, may be considered as a suburb. The valley extends downwards as far as Aussig, and upwards to Kaaden, a distance of thirty miles, the width being sometimes contracted by the Erz mountains to two miles and a half. On all sides you find the town surrounded by hills, the Schlossberg on the east, Wachholderberg on the west. Lower are the Spitalberg on the south, between the two former, Kopfhügel and Kreuselsberg to the west, the Judenberg and Schönauberger to the north-east. The three former are considerably steeper than the latter, which becomes flattened towards the Erzgebirge. The extensive princely garden begins at the foot of the Wachholderberg, and contains a beautiful chateau. The suburb lies rather lower, at the foot of the Spitalberg. The town counts 3,000 inhabitants. There are some very good private houses between the city and the suburb. Schönau is intersected by the Saubach, with the declivity of the Schlossberg as its eastern boundary, enclosed on the south by the "Spitzige" (pointed) and Judenberg, and in the north by the Granzer and Dörner heights, and the Hühnerhügel. The climate of Teplitz is very mild, and the vegetation luxurious in the immediate neighbourhood. Besides the numerous houses and mansions for the wealthy invalid, you find no less than eight establishments for the accommodation of military or indigent patients:—

1. The Herrschaftliche Hospital.
2. The Town or Citizens' Hospital, which likewise serve as almshouses.
3. Dr. John's Hospital, for indigent foreign invalids, receiving poor patients, without distinction of country or creed.
4. The Austrian Military Hospital, with extra rooms for discharged officers.
5. The Saxon Military Bath Establishment.
6. The Prussian Military Bath Institution.
7. The Jews' Hospital.
8. The Saxon foundation of the 26th of July, 1811, founded on the anniversary of a princess then in Carlsbad.

The purpose of the latter consists in not only providing Saxon

eastward, and then bends to the north again to join the Elbe, some distance above Prague.

† The Elbe arises in the Riesengebirge, below the Schneekoppe, and takes first a southern, then a western, and afterwards a northern course. If you follow its left bank, you will discover where it is entered by the Moldau, higher up by the Eger, then by the Mulde, and further up by the Saale; next by the Havel, which joins it on the right bank. From here it bends to the north-west, and does not deviate from this direction, till it has poured its water into the North Sea. The two important towns of Dresden and Hamburg are situated on its banks.

‡ A map was published in No. 13, vol. I.

* The Moldau arises in the north of the Bohemian mountains, runs first

poor requiring the baths with all necessary accommodation during the course, but also in paying the travelling expenses to and fro. Patients wishing to avail themselves of this charity, must apply to a commission before March.

The views from the heights round Teplitz are really charming. The eye ranges with pleasure over the cheerful vallies, studded with villages and rural habitations, whilst it enjoys the contrast formed by the sombre forests, antique castles, and citadels of the Erz mountains. In the princely garden you will be particularly struck by two ponds, with canoes for water exercise; by the beautiful umbrageous walks; and by the park-like farm, from the highest point of which you can obtain a view of the distant Mariaschein, Graupen, and Geyersberg. About half a league from the town you may ascend the Schlossberg. Several gently rising hills of basalt and porphyry unite into an extensive plain, and then abruptly rise as a steep cone, covered with wood at its northern and eastern side, whilst the southern wall is bald and rugged. The flattened summit bears the ruins of an old chateau, with antiquarian relics. The distant Elbe becomes here visible to you, also the battle field of Kulm, and a great number of mountains as well as works of human industry and skill. Besides, numerous other places invite your visits, such as the shooting house on the Spitalberg, with its view of the Erz mountains, the woody Lippnay, the charming "Bergschenke" (mountain inn) with its extensive perspective, the grotesque Schlackenburg, the Mont Ligne with its view of Schönau, the Judenberg with its distant panorama, the village of Dorn with its garden, hills of porphyry, and murmuring mountain-river, Probstan with its garden of pheasants, or the more distant Mariaschein (about two leagues) with its thousands of pilgrims at certain festivals, and the mountainous town of Graupen. When you enter this little town, you will be particularly struck by the strong contrast between the wild mountain scenery of the place itself and the garden-like plain in the distance. Somewhat more to the north (three leagues from Teplitz) you can visit the village of Kulm with its memorable battle field, and its memorials of the conquest of 1813. In the west you may inspect the monastery of Ossegg (two leagues distant) with its extensive orchards. On a high rock in the neighbourhood, are to be seen the ruins of Riesenburg. The little town of Dux, with its castle, and the basin east out of captured Swedish cannons, is also worthy a visit. In the village of Seberschen, a cold sulphur spring exists. Two leagues to the west of Dux, on the road to Carlsbad, the little town of Brux is often visited. To the east you may visit Aussig, on the left shore of the Elbe (four leagues distant). To the south the Mileschauer, the highest peak of the middle mountains, 2,700 feet high (four leagues from Teplitz); most extensive prospects are offered on its summit. In the east the eye reaches the Riesengebirge, the towns of Leitmeritz and Theresienstadt; on the Elbe to the south you perceive the Euler mountains behind Prague. From north to west you pursue the Erz mountain from its commencement near the Elbe to its termination near Eger. The springs originate in various places:—

1. The *Hauptquelle** issues out of syenite-porphry in the deepest part of the town, and is enclosed by brickwork. Two pipes conduct the water into the baignoires for men, three feet deep. The temperature of the source is $39\frac{1}{2}^{\circ}$ Reaumer, about 120° Fahrenheit, (thus hotter than the chief spring of Gastein); in the conducting pipe the temperature is $38\frac{1}{2}^{\circ}$ Reaumer, about 118° Fahrenheit. It furnishes more than 800,000 cubic feet of water per hour, and supplies the above mentioned common bath and numerous separate baths.

2. The *Frauenbadquelle*† arises a few paces from the former, and supplies the baths for females, those for ladies and those for women of a lower class being separated by a wall. Its temperature is $38\frac{1}{2}^{\circ}$ Reaumer at the issue, and 36° in the basin, its supply more than 400,000 cubic feet per hour.

3. *Frauenzimmerbadquelle*‡ near the former, temperature 36° to $38\frac{1}{2}^{\circ}$ Reaumer.

4. The *Sandbadquelle*§ east of the former, temperature 35° Reaumer.

5. The *Garden springs* arising in the "Spitalgarten," and having a temperature of 20° to 21° Reaumer, Trinkquelle, Augenquelle, and Badequelle, (drinking, eye, and bath spring). They yield 66,000 cubic feet of water per hour. The village of Schönau possesses, 1. *Steinbadquelle*|| lying on meadow ground at the foot of the Schönauer mountain; its temperature is 30° Reaumer, and its supply 500 cubic feet per hour. 2. *Templebadquelle*¶ 3. *Wiesenquelle*,

(meadow source.) 4. *Militärbadquelle*. 5. *Schlangenbadquelle*, (source of serpent's-bath.) Temperature of the last three from 28° to 32° Reaumer. *Neubadquelle* (source of the new bath), formerly called sulphur-bath spring, with 35° Reaumer; and, 7, *Sandquelle*, with a temperature of 34° Reaumer. For bathing, part of the water is cooled in reservoirs, and mixed with the thermal water. The water of the chief source exhibits a green appearance in the basin, but becomes clear and transparent when drawn. It is inodorous and tasteless. In cooling, carbonate of iron is found deposited in the conducting-pipes. Exposed to the atmosphere, crenic acid separates as a sort of mucus, and afterwards Priestley's green matter develops itself and becomes transformed into oscillatoria. The springs greatly resemble each other as regards their chemical constituents. Carbonate of soda is the prevailing ingredient, and amongst the gaseous contents nitrogen is either evolved in a free state (in the sand, stone, and serpent's bath), or intimately connected with the water in the others. The chief source contains in sixteen ounces,

0,43	grains of sulphate of potash.
2,68	" carbonate of soda.
0,01	" carbonate of lithia.
0,32	" carbonate of lime.
0,01	" carbonate of strontia.
0,08	" carbonate of manganese.
0,05	" carbonate of magnesia.
0,03	" carbonate of iron.
0,43	" chloride of sodium.
0,10	" chloride of potassium.
0,05	" iodide of potassium.
0,02	" phosphate of alumina.
0,13	" silico-fluoride of sodium.
0,31	" silica.
0,09	" crenic acid.

4,84—thus rather less than 5 grains. Carbonic acid, 0,39 cubic inches. *Nitrogen*, 0,49, or about half-an-inch.

In 100 parts of gas, the *Stadtbadquelle* contains about 4.7 of carbonic acid, 0.6 of oxygen, and more than 94.5 of nitrogen. This will remind you of the proportions observed at Wildbad. In former times only the baths were employed, but latterly drinking is frequently added to the external course. Moor-baths are also employed since 1835. The moor is dark-brown, of an unctuous touch, tasteless, and of a bituminous smell. It contains sulphate, muriate, and humate of soda, lime, magnesia, iron, and other bases, with a great quantity of extractive substance and humus. This carbonaceous moor is dried, then mixed with thermal water into a sort of pap, and employed of a different temperature, according to prescription, in rolling basins; a common thermal bath is immediately taken after emerging from the moor. Teplitz is found very efficacious in chronic rheumatism, in anomalous gout, with swellings and contractions, in induration of the cellular tissue, in paralysis and stiffness from wounds; also in paralytic diseases, from metastatic eruptions. A very strengthening power is likewise ascribed to the spa in derangement of the sexual system, and a regulating influence in abnormal, catamenial, and hæmorrhoidal flux.

During my visit last year the cure of a Dresden physician from paralysis, as a consequence of typhus fever, created so deep an impression, that I am induced to enter into some particulars. Dr. Wengler relates, in his 'Words of Consolation for Paralytics,' that, falling ill in 1848, he was induced to take an emetic. Not finding the expected relief, he resorted to the country by the advice of Professor von Ammon. The disease soon assumed a typhoid character. For four months he was confined to his bed. Six others were seized by typhus in the same family. His sister, 19 years of age, succumbed. In the beginning of 1849 the doctor's consciousness returned, and then he learned that, during four months, he had mostly lain in delirium, and that his life had been frequently in imminent danger from apoplexy. *He found his legs and one arm paralysed*; he could neither stand nor walk, nor was he able to sit with ease. As soon as summer approached, he was wheeled about in a chair for the benefit of the air. In April he resorted to Teplitz, under the advice of Dr. Schmelke, a highly respected resident spa physician. Neither in the pelvic region nor in the vertebral column did he feel any pressure or pain. Nutrition of the thighs was still deficient. But he could now bend and extend his legs; three months before he had always involuntarily bent the thighs, but, brought to consciousness, he had been unable to extend them. Emaciation was greater on the right side; the extensor muscles of the foot were considerably atrophied; the feet were swollen, particularly on the dorsal surface; the toes were bent inwardly, so that he could not place the whole sole of the foot on the

* Chief source. † Source of woman's bath.
‡ Source for females. § Sand-bath source. || Source of the stone-bath.
¶ Source of the temple-bath.

ground. Professor von Ammon had therefore stated it as his opinion, that *effusion had taken place at the lower part of the spinal marrow*, and was exercising pressure on the nerves of the lower extremities. The Professor particularly thought the ischiatic nerve affected. Dr. Schmelkes recommended the town baths, and procured a convenient residence for him in the Herrenhaus, where the warmed corridors prevented his taking cold whilst being wheeled to the baths, which he began the second day after his arrival, with a temperature of 28° Reaumer (95 Fahrenheit) for twenty minutes. He was lifted from his bed at 8 A.M. into the chair, then undressed in a warmed apartment, and carried into the bath. During immersion the affected parts were rubbed with a long-handled brush. After the bath he was brought to bed again (with the injunction of avoiding sleep,) and allowed some Hungarian wine for his second breakfast. He was wheeled about in the air from noon till evening, and then allowed to recline on the sofa. After three weeks, the temperature of the baths was fixed at 29° Reaumer, = 97½ Fahrenheit, and on the 13th of May the first douche-bath to the spine was administered, under Dr. Schmelkes's personal inspection. Whilst the whole back became rose red, a small place between the second and third dorsal vertebra assumed a *bluish red* colour, probably indicating the spot where the effusion had taken place, the absorption of which was now the chief task. The discolouration was greater at the right side.

He took one douche bath every other day, and afterwards, at various intervals, altogether within two-and-a-half months, nineteen douche and twenty-six general baths. Towards the end of June he returned home, with his mental faculties improved, the irritation and tickling of the larynx, with cough, was quite gone, the bowels were regular, and the urine was passed without difficulty. The right upper arm could be moved a little more freely, and the lower extremities were stronger. An eruption had appeared at the back of the foot, of an eczematous character, with small desquamations. Afterwards suppuration took place under both great toes, destroying the nails, which, however, were regenerated within six weeks. After about a week's sojourn at home, he succeeded in turning himself, and remaining a few minutes erect on his knees. Subsequently he resorted to the electro-magnetic rotatory apparatus of Keil for a quarter-of-an-hour every other day, and then every day, altogether twenty-six times. Afterwards he employed *ant vapour-baths*, by causing an ant-hill to be dug up, and the ants to be covered in a vessel with boiling water. The vapours passing along his legs, caused a pricking sensation, and abundant local perspiration. He now tried crutches, but unsuccessfully; the feet hung down like foreign bodies, and the hands became numbed from the pressure on the axillary nerves.

The following spring he again resorted to Teplitz. Baths of 29° Reaumer were at once taken without douches, but the patient used thermal foot-baths of 35° Reaumer. Double-armed crutches were now tried (distributing the weight to the hands), and this time with success. After every ten to twenty paces, the attendant had to support him with his knees, at first, to prevent his falling. At the expiration of four weeks, crutches were the only assistance required. During this stay the doctor took cognizance of the following cases:—A gentleman, thirty-four years of age, from Zwickau, whose hands and feet became paralysed in consequence of taking a cold river-bath during a heated state of the skin, was considerably improved after a six weeks' course, and able to make some use of the injured limbs. But the spa afforded little relief in paralysis of the feet, hands, and neck, occurring in a young lady of Brunswick, where nodous gout was considered to be the cause of the evil. In another case of paraplegia of the lower extremities of a lady from Pilsen, caused by the death of a married sister, and other depressing misfortunes, the baths of Teplitz had not, at the time of the doctor's departure, exhibited any good effects. But in another case, great benefit resulted from their use. A government employé from Berlin, who had used the cold water cure against ischias rheumatica, and had received in exchange for his previous complaint chronic inflammation of both the knees, with considerable effusion, preventing extension of the thighs; walking and standing were thus rendered impossible. When this patient left Teplitz with the doctor, after a course of the baths, the swelling of the knees was considerably diminished, and the patient could walk with two sticks. Dr. Wengler returned to Dresden, after three weeks residence with his family. He arrived on the 17th November, 1849. Recovery proceeded so rapidly, that in a fortnight he could dispense with crutches, and exchanged them for a hooked stick. In the middle of January, 1850, he could ascend the stairs without holding the balustrades, and a week later he could descend them without assistance also. Subsequently, for about six weeks, he

used an embrocation, composed of tincture of nux vomica, with compound camphor liniment, which was rubbed into the lower part of the spine. Afterwards turpentine was used for two months, which was followed by friction of the gluteal region and calves of the legs, twice daily, with pure brandy. Belladonna ointment was at the same time continued to the toes. After some weeks, common salt was mixed with the brandy to saturation, as recommended by Mr. William Lee.

In April, 1850, he again sought the spa, from which he had derived so much advantage. On the 5th May he took the first bath, with 29° Reaumer as before, and after twenty minutes he kept his feet for a few minutes in water of 34° Reaumer (about 109° Fahrenheit). After a few weeks' course, he ascended the Königshöhe, and to his great surprise, reached the summit without assistance or mishap, and enjoyed with delight the view of the charming valley at his feet. The doctor was rejoiced to meet in this season, the lady from Pilsen, referred to above, greatly improved, and walking without assistance. But the greatest astonishment was created by the healthy appearance of the gentleman from Zwickau, whom the doctor scarcely recognised. He also met the employé from Berlin, very much improved, but less so than the Zwickau gentleman.

During a two months' sojourn, the doctor had used forty-eight baths, and two douche baths, the latter had caused considerable aching pains in his great toe, and were therefore not continued. He found himself now perfectly well, with the following exceptions; the feet occasionally swollen; the skin very susceptible; remains of nervous contraction diminished, but still great pain in the toes after long exertion. He could walk half an hour without fatigue. After his return to Dresden, he was seized with violent pains in the great toes, the seat of the nervous contraction. Inflammation and suppuration took place under the toe of the right foot. But this great suffering was compensated by an increasing straight direction of the toes, and by decisive efforts of the extensor muscles to heighten the mobility. At last he found that the nail had inserted itself a quarter of an inch into the flesh. It was drawn out with pincers, and after the inflammation had subsided, his step became daily firmer and more erect.

Perhaps you may question the utility of the above details, and think the mere statement of the disease might have answered the same purpose.

But, gentlemen, in such compound action of remedial, climatic, dietetic, and mental influences, I consider well-authenticated cases of the utmost value, nay, indispensable for the proper appreciation of the respective curative agencies.

Diseases that will yield to specifics may well confirm the efficacy of remedies by mere enumeration. Derangements of the nervous system, however, induced by such a variety of heterogeneous causes, or *abnormalities* of other organs, and requiring such various corresponding modes of treatment, may be considered almost in each case as special disorders. Let us subject the remarks of the doctor to some examination.

It will be admitted that a well-established instance of *paralysis from typhus-fever* has been chiefly cured through the power of Teplitz. We have also seen paralysis, through the sudden effect of cold, cured by the same agency; and thirdly metastatic inflammation of the knees, accompanied with effusion, greatly improved, whilst no perceptible effect was perceived in paralysis of the lower extremities from nodous gout. I may take occasion to observe, that according to the view I offered in the lecture on Wildbad, the latter case was peculiarly fitted for the Wurtemberg spa, where the combined influence of chloride of sodium and nitrogen might have brought about a result unobtainable at Teplitz, however multifarious the range of indications may be for the Bohemian akrotherma. Taking into account the effect we may expect from thermal water penetrating the absorbent vessels and adding carbonate of soda and of lime with some chloride of sodium to the circulating fluids, we may distinguish cases requiring the spa with predominant carbonate of soda. The nervous system having, in the case of Dr. Wengler, lain so long in comparative prostration, with the attendant irritation of the alimentary mucous membrane, the sodaic liquid in the first instance diminished the gastric irritability by neutralizing its acidity. In the next place it promoted the renal function by diminishing the oxygenating tendency of the blood, consequently the excessive formation of uric acid. We saw improved vesical action in the first course. By thus indirectly promoting fluidity of the nutrient liquid, the reflux of venous blood must become facilitated; add to this the local irritation resulting from the douche, favourable to an improved cutaneous innervation, and at the same time forming a revulsive from the internal affection, and you will require no mysterious agency to obtain a satisfactory explanation of the cure brought to your notice, and a sure indication will be given for analogous instances.

The case of paralysis through the cold bath will admit of the same explanation. The spinal marrow has been chiefly subjected to injury, the bladder will naturally take a sympathetic part, and secondarily, the alimentary canal. In the third case of metastatic inflammation, through the slow action of cold, we have already witnessed a less degree of efficacy. The improved action of the nervous system was not sufficient to induce absorption of the exudated particles; whenever increased action of the absorbents is desirable the patient should choose Wildbad. It is highly improbable that four spas should be equally curative, while they each possess different ingredients in predominance, viz., one chloride of sodium, another carbonate of magnesia, a third sulphate of soda, and a fourth carbonate of soda. You will find that the other points which I have still to mention concerning Teplitz, quite agree with the views I have ventured to lay before you.

As regards the temperature of the baths, it is necessary to guard against using the hotter ones improperly. Those of Schönaue are preferred where cooler baths are required. As a general rule, it is advisable always to begin with the cooler baths, and then raise the temperature with great care and circumspection, if demanded by the morbid phenomena. I need not state that plethoric persons, or those inclined to apoplexy, to congestion, or to obstipation, have to avoid the warmer baths, and often to avoid the spa altogether. As also persons with cretic weakness, or tendency to thoracic affections. Torpid and phlegmatic individuals will bear the warmer baths better. The country people always prefer the higher temperature, and resort to cupping, in order to guard against mischievous consequences. The danger of this habit is too obvious to require further comment. Teplitz is also very frequently resorted to as an after cure of Carlsbad. Some, by the advice of their physicians, others from their own accord, seek in Teplitz restoration and invigoration, after having undergone a somewhat weakening course of Carlsbad in cases of obstinate obstruction of the liver, lithiasis, or gout. Unfortunately, this class of patients consider themselves justified, nay called upon to live freely and indulge in the luxuries of the table, which were denied them by the strict dietetic rules necessary at Carlsbad. Carelessness in drinking cold beverages after different sorts of fruit is one of the most frequent occurrences.

At my visit last year, the cholera had suddenly broken out (in August), and carried off several victims very rapidly, and, strange to say, almost exclusively those that had previously used one or other of the pikrothermæ. This caused such a panic that the place was cleared of its numerous fashionable and unfashionable visitors in a very short time; this occurred at the height of the season. Still every death was clearly traceable to the sufferer's own intemperance or want of caution, and especially to the habit just referred to. Not one of the inhabitants was seized by that formidable disease, which overtook so unwarily some of the more prominent personages, and destroyed several lives very rapidly. Both from medical and philanthropic reasons, I felt extremely gratified to find confirmation of the notion forced upon me by the observation of the epidemic in London, viz., that no disease can be prevented with more safety and certainty than cholera, and, above all, that unguardedness, especially in drinking, is one of the most frequent, if not absolutely the chief provocative of the disease. At least I found, in my limited experience, those cases the most virulent which could be traced to the cause alluded to, whilst on the other hand, the mere eating of even indigestible or excessive nutriment had not the power of producing that mysterious disease, which has so long baffled all known methodical modes of treatment. But I consider it a great consolation for our profession, that though no efforts, nor ingenuity of science, could discover a specific, we have at least acquired by experience the knowledge that certain remedies will not combat the evil, whilst well-defined precautions will positively guard against it. According to my own belief, it is quite impossible that a specific should ever be found against cholera. From the various cases that have fallen under my observation, I could not help coming to the conclusion, that the disease was not only different in different individuals, but that in the same subject you have a series of perfectly distinct and I might almost say opposite morbid phenomena before you, which so vary in their nature, that a remedy curative of the one series must be rationally considered useless or even injurious to the other. For instance, I have found the stage of collapse (where the extremities exhibit an icy coldness, the face a livid hue, and the wrists absence of or scarcely perceptible pulsation) a disease in which the constant vomiting and purging are not only not to be checked, but this violent intestinal irritation seems actually an effort of nature to fix the vitality, and prevent its flagging away under the intense prostration of the whole nervous system. During this period such remedies only can be of any avail, which tend to restore vitality and animation

without the slightest regard to the stormy alvine action. But the means answering their purpose in this stage will be quite useless in the next, when more vitality has been recalled, and reaction commenced. Now the morbidity of the abdominal phenomena demands urgent removal. There is not the slightest doubt that this circumstance caused so many conflicting reports, and such sad disappointments from every possible remedy suggested. But let it be a fixed rule, gentlemen, with you, if ever unfortunately the epidemic should revisit this island, that specifics, recommended by whatever authority, are based on delusion too soon to be dissipated, and if you desire to spend the utmost mental and physical energy in conquering the almost invincible enemy, step before the patient with an unbiassed mind, with a perfect disregard of lauded specifics and even of the name of the disease; observe the morbid phenomena, and counteract them out of the ordinary store of healing agents at your command. But to insure success the patient must be seen every few hours, and the remedies varied according to the above rule. What I state to you here, gentlemen, is not mere theory, but the digest of observed facts, and it was God's will that under this method several cases were cured, where no hope of recovery existed at the outset.

I hope, gentlemen, that I shall require no apology for having introduced this or other important subjects, apparently extraneous to our course. Observations tending to lessen in the slightest degree the manifold difficulties that will cross your path in the practical recognition and treatment of disease, will perhaps not be thought by you quite superfluous in after life.

(To be continued.)

CORRESPONDENCE.

CASE OF INTERNAL HÆMORRHAGE BEFORE DELIVERY.

To the Editor of 'The Institute.'

BETWEEN 9 and 10 o'clock A.M., on the 28th of January, I was summoned to Mrs. C., six months advanced in her tenth pregnancy, who had been seized with severe pain, followed by faintness; so pale had she become that her husband thought she was dying.

When in the act of stooping she had been seized suddenly with severe pain in the region of the uterus, which was speedily followed by faintness, bordering upon actual syncope, in which state I first saw her. She was extremely pale, the pulse scarcely perceptible at the wrist, and the pain in the lower part of the abdomen severe. She had no discharge, and on examining per vaginam the os uteri was found to be closed. The movements of the child had been lively as usual up to the time of the attack, since which they had ceased to be felt. By the time I had administered some warm brandy and water, Mr. Hurst, who had also been sent for, arrived, and we concurred in at once giving an opiate draught, and attempting to relieve the tendency to syncope by administering from time to time small quantities of brandy and water, and small doses of sal volatile at short intervals, enjoining strict rest in the horizontal position.

My patient passed through the day with frequent alternations of faintness and reaction, together with occasional vomiting. Towards the evening she complained of a feeling of tightness over the whole of the abdomen, which, as she expressed it, "she could not indent," and to my own impression the abdomen appeared much more tense, and the size of the uterus more considerable than in the morning. At 6 o'clock P.M. I made an examination per vaginam, and found the os uteri still closed; there was no discharge. She had passed the urine during the day.

Soon after 7 o'clock P.M. I was called again to her, and ascertained that a small quantity of blood had escaped per vaginam. The os uteri was sufficiently dilated to admit the tip of the finger. She had pain in the abdomen, but not of an intermittent character. A dose of the *secale cornutum* was administered.

Shortly afterwards she had a strong desire to relieve the bowels, when about three parts of a chamber-vessel full of dark coloured liquid blood was speedily passed. Considerable faintness was experienced, and the pulse flagged. Under the influence of brandy and water the pulse rallied, and she expressed herself as considerably relieved of the tightness of the abdomen; which indeed, on the application of the hand, was observed to be perceptibly less tense than before. The os uteri was dilated to the size of a shilling, and dilatable; the membranes were slightly protruding, and something like the edge of the placenta could be felt. Another powder of the *secale cornutum* was given, and in about ten minutes a more decided labour pain came on, accom-

panied with the bulging of the membranes. The subsidence of the pain was followed by free hæmorrhage. My patient's strength was seriously diminished—the pulse scarcely perceptible—with considerable restlessness, and frequent vomiting. I requested a consultation with my experienced friend, Mr. Hurst, who suggested the rupture of the membranes during the next pain, and we administered a third powder of the *secale*, and small quantities of brandy and water at short intervals. During the next pain, I ruptured the membranes, when a considerable quantity of liquor amnii escaped, and a foot could be felt. From this time the hæmorrhage was inconsiderable, the pains came on regularly, the os uteri speedily became fully dilated, and the labour progressed most favourably. The last pain (about 9 p.m.) was accompanied by the expulsion of the head and the placenta at one and the same time. The placenta was of small bulk, and unusually pale; the child still-born and blanched.

Our patient has since been going on favourably, requiring only the care and treatment necessary in a decidedly anæmic condition of the system.

Remarks.—This case would appear to be one of unusual occurrence, and of considerable interest. It would appear (and Mr. Hurst fully coincides with me in this opinion) that the placenta became partially, if not entirely detached from the uterus at the time she first suddenly felt the severe pain in the uterine region, and that the consequent flow of blood gave rise to the early symptoms of collapse; but for upwards of nine hours after the first attack, there was no external manifestation of hæmorrhage. During this period the walls of the uterus gradually relaxed, and allowed the accumulation within its cavity of a quantity of blood, which gave rise to the extreme tension of the abdomen, which was a prominent symptom of the case until relieved by the profuse gush of external hæmorrhage, upwards of nine hours after the first attack.

In concluding this hasty sketch, I would earnestly invite any of your numerous readers who may have made notes of any similar cases, to forward them for insertion in your Journal. I shall also be pleased to observe any remarks on the above case, which may suggest themselves to the minds of any of your obstetric readers.

I am, Sir, yours, &c.,

THOMAS HERBERT BARKER, M.D.

Dedford, February 5th, 1851.

To the Editor of 'The Institute.'

Sir,—As the ostensible organ of the General Practitioners I beg an early place in your pages, for the purpose of directing the attention of your readers who are Fellows of the Royal Medico-Chirurgical Society, to the ensuing election, on the 1st of March, of Councillors and other officers of that Society, and to urge upon them the necessity of their endeavouring to place on the Council more of their class than have been accustomed heretofore to be on it—numbering as the General Practitioners do more than one-third of the Society, it appears extraordinary that not more than one of their class has been on the Council at a time, and with one exception there has not been a General Practitioner a Vice-president since its foundation—that exception is the late Mr. Langstaff. Surely the members of the Council of the Society of General Practitioners, many of whom belong to the Medico-Chirurgical Society, ought to look to this. In the list of the Fellows there are many who would very creditably discharge the duties of Vice-president—such men as Messrs. Hamerton, North, and Dunn; as Councillors there are Messrs. French, Harding, Squibb, and others, who have been many years connected with the Society, but who have never filled any of those offices. This is a matter to which I feel bound to call your early attention, for it appears extraordinary that a body of men, who either seek the control of the College of Surgeons or a new incorporation, in vindication of their honour and position, should consent to occupy an inferior position in a Society where they can exercise powers, and more especially as it is the only Society in England where it is suffered to exist.

I am, Sir, yours, &c.,

MEDICUS.

February 8th, 1850.

LONGEVITY.—In the *Obituary* in the *Times* of Wednesday it will be found that the united ages of ten persons amount to the extraordinary number of 804 years, being an average of rather more than 80 years.

MEDICAL INTELLIGENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 28, 1851.

S. SOLLY, Esq., F.R.S., Vice-President, in the chair.

ACCOUNT OF A CASE IN WHICH THE CÆSARIAN SECTION WAS PERFORMED.

WITH REMARKS ON THE PECULIAR SOURCES OF DANGER ATTENDANT ON THE OPERATION.

By CHARLES WEST, M.D.,

Physician-Accoucheur to St. Bartholomew's Hospital, and Medical Lecturer in the Medical College.

THE subject of this history was a young woman, aged 27, a patient of Mr. Wren, of Brownlow-street, whose health had always been indifferent, but whose person was not apparently deformed, and who reached the end of her first pregnancy without manifesting any symptoms especially calling attention to the state of her osseous system, with the exception of pains of a rheumatic character, and difficulty in walking, which last became very great during the last two months of her pregnancy. When labour came on, which it did at the end of the full period of utero-gestation, the existence of extreme pelvic deformity was at once ascertained by Mr. Wren, in whose opinion, as well as in that of Dr. West, Dr. Murphy, and Dr. Ramsbotham, the performance of the Cæsarian operation was indicated. It was accordingly performed by Mr. Skey fourteen hours after the commencement of labour, and eight hours after the rupture of the membranes, uterine action having, however, been feeble from the first, and having almost ceased since the escape of the liquor amnii. The patient was by her own desire subjected to the influence of chloroform before the operation was begun; no difficulty was experienced in its performance; and a living female child was extracted. Very formidable hæmorrhage succeeded the removal of the placenta, and the subsequent contractions of the uterus were very tardy in their occurrence. The patient was left in a state of great exhaustion, from which she never completely rallied, and died in 108½ hours after the operation, apparently from the conjoint effects of the hæmorrhage during the operation, and of the shock of the nervous system. The treatment consisted in the administration of stimulants and nourishment, both by the mouth and in enemata, and the patient was kept in the same manner almost throughout under the influence of opium. The body on examination after death, presented no evidences of serous inflammation, but the uterine wound was gaping widely, and even that of the abdominal walls was but partially closed. The pelvis presented, in a most marked degree, all the characteristics of that deformity which is produced by mollities ossium; the pubic bones being projected into a beak 1·2 inches in length, the width of the pubic arch being reduced to 6 of an inch, and the distance between the tuberosities of the ischia to 1·2 inch. The writer having noticed the high maternal mortality resulting from the Cæsarian section, which he estimated at much more than the number of 63 per cent., at which the statistics of all cases recorded since 1750 place it, since the results of cases occurring in hospitals abroad yield a maternal mortality of 79 per cent., and of cases in this country of 85·4 or 87·5 per cent., according to two different estimates, proceeded next to point out the apparently inevitable causes of this high mortality. These causes he referred to four heads, and illustrated their respective influence by reference to a table of 134 fatal cases in which the body was examined after death. The four heads are as follow:—1st. The danger arising from hæmorrhage, which proceeds from a source different from that whence bleeding takes place in any other operation, and which is not capable of being arrested by the same means as suppress it under ordinary circumstances. 2nd. That dependent on the shock inflicted on the nervous system, as well by the violent interference with the most important process that ever goes on in the organism within the same limited time, as by the injury to a part so important and so richly supplied with nerves as the uterus of a parturient woman. 3. The hazard inseparable from extensive injury to the peritoneum, when unblunted in its sympathies and unaltered in its texture, as in cases of ovarian or other tumours, for the removal of which a similar exposure of the abdominal cavity is sometimes practised. 4. That which results from the infliction of a wound on the uterus at a time when, in the ordinary course of things, the processes which nature is prepared to carry on in it consist in the disintegration and removal of its tissue,—processes the very opposite to those essential to the repair of injury. From a consideration of all these sources of danger, to the last of which attention has

hitherto scarcely been directed, the author arrived at the conclusion, that they being so serious, and so beyond the power of art to prevent, the rule which forbids the performance of the Cæsarian section, wherever there is a reasonable probability of accomplishing delivery by the natural passages, is founded on solid grounds, and ought to be adhered to.

(To be continued.)

EPIDEMIOLOGICAL SOCIETY.

February 3rd, 1851.

Dr. BABINGTON, President, in the Chair.

(Continued from page 109.)

Mr. Grainger could not allow the paper just read, nor the very interesting communication by Dr. Bryson, read at the previous meeting, to pass without offering some observations. All circumstances show that in endeavouring to arrive at the fundamental laws of epidemics, a large view of the question must be taken. We must first determine the great laws, and then examine into the exceptions. Cholera, as a great epidemic, spreads in a manner not to be accounted for by human communication—that is to say, not by contagion from one person to another. It seems to have a preference to certain places, that is, in different epidemics it appears to affect the same places again and again, whole districts escaping in each invasion, and certain localities being repeatedly attacked. It appears indeed to be more a question of locality, than of persons. This has been fully shown on the continent, where all the great routes of communication have been changed by the railways since the previous epidemic; and yet, during the last invasion, the same places were attacked as during the previous one. Hamburgh, for instance, suffered on each occasion; and yet, though constant communication was maintained with Hanover, that kingdom entirely escaped, with the exception of one town—Lüneburg. It may be assumed, as the last-named town now forms one of the stations of the railway communication, that this constitutes a fact in favour of contagion; but the same phenomenon occurred also on the former occasion, when there was not a railway, and therefore it supports the doctrine of the disease affecting certain localities. In Birmingham, again, although seated in a highly infected district, with thousands of persons constantly passing through it, yet there were not any cases of the disease on either occasion. Cholera does not obey the same laws as small-pox; it always attacks in groups—in groups of persons, in groups of towns. In the large hospital at Hamburgh, in which, with patients, nurses, attendants, &c., there were 1,600 persons, about 370 cholera cases were admitted into two of the wards, in which the nurses of the hospital did duty alternately, returning from them to the other common wards, and the patients, as they became convalescent, were removed from these wards into the others. This continued for more than a fortnight, and yet no instance of the disease among the other patients occurred. The epidemic in the first instance, showed itself in a distant part of the town; after the lapse of a fortnight, it approached the district where the hospital was situated, and six cases occurred in the houses in its neighbourhood. Then the patients in the hospital began to suffer, and to be attacked with the epidemic, as the other inhabitants of the city were. The number of attacks in the hospital amounted to 22 out of 1,600, that is, one in 79, the attacks in town being as one to 43, so that the hospital, although it had received nearly 400 cholera patients, in reality suffered less than the city did. Those cases in which the disease was said to have been communicated by shipping, as in Dr. Bryson's paper, were of the utmost importance. In November, 1848, two vessels cleared out from Havre, where there was not any cholera at the time, one for New York and the other for New Orleans. The day after the last vessel had arrived in port, a person on board was seized with cholera, was taken on shore to the hospital, and died there. The same day a case occurred in New Orleans; and the day after there were two more instances of the epidemic disease in the town. Dr. Parkes states that the two last persons had not had any communication with the shipping. It was, therefore, entirely a case of coincidence.* Again with respect to cases where relatives are attacked; this is constantly occurring in other diseases, such as catarrh, which may run through the house, and yet not be attributed to contagion. The handling the bodies of the sick and dead, has also been said to contribute to the spread of the disease; yet medical men are constantly in

the habit of doing this with impunity. Of all the medical practitioners in Hamburgh, during the late epidemic, only one died of the disease, and his case is not applicable to this view of the question, as he was not engaged at the time in the treatment of patients suffering from the epidemic. In Berlin, all the persons employed in placing the bodies of the dead in their coffins, escaped the disease. Six thousand workmen, residing in all parts of the town, were at a place at some little distance, where they were occupied from twelve to fifteen hours daily, returning afterwards to their homes and families. Of these, only eight were attacked, their exemption being apparently due to their withdrawal from the noxious emanations evolved in the neighbourhood of their habitations, during the time they were at work. It may be said, if fever cases be admitted into hospitals, the disease will spread. Now he had heard that at St. Thomas', where such cases are admitted indiscriminately into the wards, a few additional cases sometimes occur, but that the patients in the surgical wards, where the fever cases are not placed, are just as liable to an attack of that disease, as those who are in the medical wards of the establishment.

Mr. Hunt remarked, that very strong evidence had been adduced in support both of the question of contagion and of non-contagion. He had received communications on cholera from no less than forty medical men in different parts of the country, and these he had examined especially with reference to that question. Some of them adduced very strong evidence indeed as to the influence of contagion in causing the spread of the disease. He then referred to Dr. Snow's opinion on the cause of the epidemic, and observed, that it is necessary to admit that it may be communicable, in some cases, from person to person. Again, there is positive proof that the disease may exist in some localities for a length of time, and yet not afford any distinct evidence of contagion. Such was the case during the invasion of cholera at Herne Bay, in the year 1834, and so it appears, from the paper of Dr. Hoskins, just read, was it in Guernsey. There are other diseases besides cholera which occasionally appear to be contagious, and at other times are not so. Puerperal fever, he believed, was now generally admitted to be contagious in some instances, so as to render it dangerous for the medical attendant to visit other cases of parturition; nevertheless, isolated instances of disease are non-contagious. Erysipelas also often manifests the contagious influence in the wards of our hospitals, but does not always possess it. He might say the same of scarlatina. He had seen a child—one of a family of children—suffer from all its well-known symptoms, followed by dropsy, while the other children entirely escaped, some of them, perhaps, being attacked by the exanthema at a later date. So, also, was it the case with fever, and, perhaps, with some other diseases. The present state of our knowledge would not enable us to explain the fact, but he felt convinced that cholera was in some instances communicable from person to person, and in others it was not.

Dr. James Bird had seen the cholera in India from 1818, and it was the general opinion in that country—and he himself fully coincided therein—that the disease was not communicable, but might become so under peculiar circumstances. It is not generally communicable in India, as scarlet fever or small-pox is. It may be either endemic or epidemic. During the time that he was superintending surgeon in the Bombay Presidency, the reports received from the surgeons of the different regiments showed, that it had become an epidemic, but such was not often the case in that Presidency. When it appears as an epidemic in India, the predisposing causes are sometimes of an endemic, sometimes of an epidemic nature. When the latter prevail, they are evidently of atmospheric origin, and gastro-enteric and diarrheal maladies are of frequent occurrence. During the march of troops, the sepoy erect for themselves small close huts, in which they live with their families. The disease breaking out under such circumstances, it became communicable, as in influenza, whooping-cough, &c., when individuals are accumulated and crowded together in close, ill-ventilated places. The sepoys, on the recommendation of the medical officers, were removed from their huts, and lived in pitched tents, after which the disease disappeared. He (Dr. Bird) believed, that the poison of cholera was not absorbed through the skin, but was inhaled through the respiratory organs.

Dr. Gull would suggest whether the actual specific, or material cause of cholera must not always be the same, as the results always were. The next question was, whether the poison could be generated in the body, or always out of it, as in the case where the sepoys were crowded together, whether there might not be a physical cause for the disease in the hut, independent of the men? He (Dr. Gull) thought the disease was owing to an external malarious cause. There are certainly some poisons that

* Mr. Grainger spoke so rapidly, and let his voice drop so often, especially at this part of his speech, that we were unable to hear what he said respecting the vessel that cleared from Havre to New York.—REP.

can be generated in the body, such as small-pox, but these cannot be produced by external decomposition.

Dr. Thompson referred to the great diminution in the mortality of cholera on the Sabbath and on days appointed for special prayer, as illustrating the powerful influence of the mind. This diminished rate of mortality was not observed on the continent, in papist countries, where the Sabbath day is disregarded.

The paper for the next meeting, in March, is by Dr. McWilliam, "On the Yellow Fever, as it lately appeared in the Brazils."

[ERRATUM.—In the Report in the last number, for "Boriët," whenever the word occurs in Dr. Hoskins' paper, read "Bouët."]

MEDICAL SOCIETY OF LONDON.

January 25th, 1851.

DR. BENNETT, President, in the Chair.

(Continued from page 168.)

Mr. Wade read a paper entitled,

PRACTICAL OBSERVATIONS ON THE TREATMENT OF PERMANENT STRICTURE OF THE URETHRA.

The author commenced by an allusion to the great extent of the subject of his paper, and the difficulty he felt, in being obliged to read his paper in abstract, to convey to the society all that he could desire respecting the subject of stricture. Any omission on the subject he trusted would be regarded as incidental to his position; but as he had already placed his views on stricture in general before the profession, in his work on stricture, he felt less hesitation in confining himself, on the present occasion, to some of the more salient points which were agitating the profession. Stricture of a permanent character was strictly a surgical disease; for although medicine might do much to mitigate the sufferings of the patient, the disease was curable only by the manipulations of the surgeon. After speaking of the three means usually adopted for the cure of stricture, namely, dilatation, the use of caustics, and the division of the strictured part by means of cutting instruments, he proceeded to discuss these different modes of proceeding in detail. With respect to dilatation, the most natural, and undoubtedly the best method of proceeding, where it could be employed, he observed that it was not every case that was amenable to this proceeding, and he should presently direct attention to those cases in which other means were imperatively called for. The author then remarked that to be successful in the treatment of any disease, the means employed should be adequate to the attainment of the end in view. In his own practice he, in a great number of cases, had had recourse to the use of potassa fusa; and to place this valuable drug in its true and legitimate position as a curative agent, was one of the main objects upon the present occasion. After paying a well-merited compliment to the late Mr. Whately, as the first surgeon who used caustic potash in stricture, he proceeded at once to show in what respects his plan differed from that of Mr. Whately. He observed, that the distance of the stricture from the external orifice of the urethra should be marked on the bougie, and a small piece of potassa fusa inserted into a hole made in the apex of the instrument. He usually commenced with a piece of caustic, as large as a common pin's head, and gradually increased the quantity if required. In old, hard, gristly strictures, he found it necessary sometimes to use from half to three-quarters of a grain. The apex of the caustic should be well covered with lard, and the instrument well oiled, before using it; the armed bougie should be gently pressed against the stricture for a minute or two, if impermeable, and then withdrawn. When there is a false passage, and the obstruction is beyond the straight part of the urethra, he used a curved canula for the application of caustic. When the caustic is applied to permeable obstructions, the bougie should be gently passed three or four times over the whole surface of the stricture. From its being miscible with oily substances, potassa fusa might either be used as a mild stimulant, or as a powerful caustic. Potassa fusa, when efficiently used for the destruction of a stricture, appeared to exert its salutary effects by causing a process of inflammatory softening, and dissolution of the thickened tissue forming the obstruction. A sufficiently free application, to be efficient in old hard strictures, is usually followed by more or less of a slimy muco-purulent discharge, mixed at first with blood, but soon becoming of a dirty-white colour. The author did not, like Mr. Whately, use potassa fusa in all cases indiscriminately, but only in such as did not yield to simple dilatation. He found that the caustic not only required to be used more freely than was practised by Mr. Whately, but that it might be advantageously

applied at shorter intervals than recommended by him. He believed that when used in the minute quantities employed by Mr. Whately, that the action of the caustic was simply that of allaying irritation, as, when mixed with lard and oil, combined with the mucus of the urethra, it could scarcely have any effect beyond that of a mild solution of caustic, which probably caused a more healthy action of the lining membrane of the stricture. The cases in which the author had employed potassa fusa advantageously were,—1st. Strictures of a cartilaginous hardness, impervious to instruments. 2nd. Strictures of long standing, which, although admitting the passage of a small instrument, bleed more or less freely on its introduction. 3rd. Irritable strictures. It will be seen by these observations, that the author regards the minute quantities recommended by Mr. Whately as totally inefficient in many of the more aggravated forms of stricture. He then briefly detailed the particulars of some exceedingly interesting cases in which he had employed the agent in question. These were illustrations of severe, irritable, and old, hard, gristly strictures, which had resisted every means previously resorted to by other surgeons. The good effects of potassa fusa were strikingly illustrated. Mr. Wade stated that the method of treating strictures by potassa fusa was brought forward by him in a paper read at the Westminster Medical Society on the 15th of February, 1840, he having then for several years successfully employed that remedy in the treatment of stricture. His object in that paper was principally to show the great value of potassa fusa in impermeable strictures, and at the same time to define, with some degree of precision, the nature of the cases in which it would prove useful. He could truly say, that subsequent and far more extensive experience had increased his very high estimation of the admirable effects of the caustic alkali in the relief or cure of urethral obstructions. No other remedy he had ever employed had afforded him so much satisfaction, and it had often surpassed his expectations in the speedy relief it had afforded in cases of the very worst description. The author gave a short history of the introduction of escharotics in the treatment of urethral obstructions, in which he more particularly alluded to the experience of Hunter and Home, and pointedly remarked, that however rash the practice of Sir Everard Home might appear to be, his work on the subject of stricture had, at least, the rare merit of showing the injurious, as well as the beneficial effects of the nitrate of silver. The author alluded to some observations on the use of caustic by Professor Syme, in the *Monthly Journal of Medical Science*, July, 1850. In these observations there were published some letters addressed to the grandfather of the present Mr. B. Bell. It might reasonably be supposed that these letters, eight in number, thus disturbed from their time-honoured slumbers, contained ample evidence of the inutility of caustic in stricture from men who had impartially tested its curative powers in that disease. It happened, however, that these letters were written by Sir E. Home's contemporaries and rivals in practice, who were opposed to his views, and, consequently, used every possible objection against them. Mr. Wade observed, that it would have but been even-handed justice in Mr. Syme, if he had at the same time also published a letter of Sir E. Home's to the late Mr. B. Bell, which appears in Sir Everard's second volume on Strictures. This letter was written in reply to one from the late Mr. B. Bell, containing an account of the case of a gentleman suffering from bad stricture, in whose case Mr. Bell had used the caustic unsuccessfully, and the patient then placed himself under the care of Sir E. Home. The letter was as follows:—

Sackville-street, Sep. 19, 1799.

DEAR SIR,—The condemnation of my mode of treating strictures flattered me exceedingly, as it is evidence on record of my having acquired a more extensive knowledge of the disease than had been attained by the surgeons in Edinburgh. After such a decision, success was hardly to be expected from the use of caustic in your hands. It will, however, gratify a man of your humanity to learn, that five applications of the armed bougie, without the aid of medicines, have enabled the patient to pass a full-sized bougie into his own bladder; and as all his other complaints have left him, you will agree in believing that they must have been symptomatic of the stricture in the urethra.

I am, &c.,

E. HOME.

Mr. Wade then alluded to Mr. Stafford's plan of division of strictures by the lancetted catheter, which, although it had been frequently successful in the hands of that gentleman, must be considered as somewhat hazardous; for when there was much condensation of tissue at the seat of disease, the most expert anatomist could scarcely be certain of cutting in the right direction. It might be added, that when Mr. Stafford's operation had been so far successful that the bladder had been fairly reached, it had often been found impossible to preserve the advantage thus ac-

quired, the obstruction having returned as bad as ever. The author observed, that although in strictures at the curved portion of the urethra he should not venture to adopt Mr. Stafford's plan, yet, when in the straight part of the canal, in case of failure with potassa fusa, he should not hesitate to use the lancetted catheter, as the finger could then ascertain, with tolerable precision, that the instrument was properly directed. He then alluded to perineal section, which he thought had been lately too much the fashion, but which he had ever considered an operation too perilous and unsatisfactory in its results to justify its performance, except as a last resource; he gave a condensed statement of the statistics regarding the operation, as usually performed, and sufficiently proved that it must not only be considered dangerous, but extremely unsatisfactory, in its results. With regard to Professor Syme's new operation for permeable strictures, the author, without entering into the question as to the necessity for its performance, observed that it was not always a safe one, as had been so confidently asserted by that gentleman, who flattered himself that he had discovered "a simple, safe, and easy mode of cure for the worst cases of stricture." To prove that it has not always been a safe operation, he mentioned two published cases, which had been attended by fatal results. At one of these he had himself been present, and although no operation could have been more skillfully performed, a No. 6 grooved staff having been previously passed into the bladder, the patient undoubtedly died from its effects within a fortnight from its performance. Allusion was then made to the following conclusions from Mr. Syme's work on Stricture:—"1. That division of a stricture by external incision is sufficient for the complete remedy of the disease in its worst form. 2. That in cases of less obstinacy, but still requiring the frequent use of the bougie, division is preferable to dilatation, as affording relief more speedily, permanently, and safely" (p. 58). He (Mr. W.) observed, that in some previous remarks upon this mode of treatment he had ventured to question the soundness of these conclusions, having expressed his doubts as to the new operation affording a permanent cure of stricture, for the following reasons:—"1. That the thickened tissue is not removed by the knife in Mr. Syme's method, any more than in the one which had been commonly adopted in impermeable strictures. 2. That although a grooved director, in the new method, is passed into the bladder as a guide to the knife, yet the natural urethral membrane can form but a very small part of the enlarged passage, the greater part of this new channel being necessarily made through the condensed tissue at the seat of the disease. The author then quoted the following passage from Mr. Syme's work: "It is now universally admitted that the bougie acts by exciting a degree of absorption of the thickened texture, which occasions the contraction and induration concerned in the formation of stricture. To produce this, the instrument should be employed with the utmost possible gentleness, and should not be allowed to remain in the urethra more than one or two seconds." The author, after observing that there was scarcely another surgeon at all experienced in the treatment of stricture, who would not protest against such a frivolous use of the bougie, quoted the following passage from Mr. Hunter's work:—"The cure by dilatation is, I imagine, principally mechanical when performed by bougies, the powers of which are in general those of a wedge. However, the ultimate effect of them is not always so simple as that of a wedge upon inanimate matter, for pressure produces action of the animal powers, either to adapt the parts to their new position, or to recede by ulceration, which last is not so readily effected." The author went on to observe, that if a bougie was permitted to remain in the hard contractile strictures described by Mr. Syme, but for one or two seconds, then, indeed, the knife must do the work which the bougie was not permitted to accomplish. However skillfully the division of a stricture may have been effected, who could ensure his patient from the occurrence of erysipelas or phlebitis? What degree of human care or foresight could so brace up the cords of life to the enduring point, as always to guard against a fatal prostration? It might so happen that a patient would have to submit to perineal section whose vital powers had been so worn down by previous suffering, that the loss of a few ounces of blood might be sufficient to turn the scale against him. With the late calamitous terminations of this operation, like beacon-lights to warn us of its dangers, he could not but think that we are bound to relieve a stricture-patient by every means in our power, before having recourse to the knife. There were some remarks of the late Mr. Aston Key, with regard to operations, which we should all of us do well to bear in mind. They occurred in *Guy's Hospital Reports*. When alluding to division of the prepuce in phimosis, Mr. Key observes: "As the knife is at all times but an indifferent substitute for skill, and should ever be avoided, if

possible, the circumstances rendering it unnecessary are not beneath consideration." Taking these words for his text, the author then described the circumstances under which the surgeon may be justified in submitting a patient to perineal section, as there were undoubtedly cases—fortunately of rare occurrence—in which that operation would afford the only chance of relief; and there were others, equally rare, where it might probably be the most judicious proceeding. In some strictures from mechanical injury, where there had been more or less sloughing of the injured parts, and a hard, gristly cicatrix had been left, the greater part of the urine being probably passed through fistulous orifices in the perineum, perineal section might be the only chance of relieving the patient. Where the urethra had been divided by a wound in the perineum, a hard cicatrix might be formed at the seat of injury, and if the contraction could not be kept sufficiently open by other means, to ensure the patient from danger, division by the knife might become advisable, although that proceeding would not always be successful. A case of hard contractile stricture, not the result of mechanical injury, might occasionally occur, long impermeable to all milder means of treatment, and in this when the patient's general powers were suffering severely, perineal section would probably be advisable. Mr. Wade believed however, that such cases are of rare occurrence; and in proof of what might be accomplished by dilatation, when properly and perseveringly employed, alluded to a striking instance mentioned by Sir B. Brodie in his valuable Lectures on the Urinary Organs. In that case the stricture was of the worst kind; and although no instrument had entered the bladder many years before the patient's application to Sir Benjamin, the latter, by occasional firm pressure made with the solid silver sound against the obstruction, continued from five to fifteen minutes at a time, at length succeeded in passing an instrument through the stricture, but not until after one year had elapsed. The author observed that there were few cases of retention of urine, supposing an operation to be necessary, which would rarely be required, in which he should not prefer puncturing the bladder to perineal section, the former operation being, in his opinion, far less hazardous than the latter. He referred to several cases of retention from stricture recorded by Sir E. Home, in which that surgeon punctured the bladder by the rectum, and afterwards readily dilated the obstructions which had been previously impermeable. He also mentioned a similar case in his own practice, where the stricture, although for many years impermeable, became so dilated after the bladder had been punctured, that in a month's time a No. 6 bougie was easily passed. The author observed that, from Mr. Syme's position as a teacher, that gentleman's strong recommendation of perineal section in strictures which do not readily yield to dilatation, appeared to him as being so likely to lead to fatal results in the hands of others, that he considered it a duty to comment freely upon the professor's views regarding urethral obstructions. With regard to Mr. Syme's startling assertion, that there was really no impermeable stricture except from the awkwardness of the surgeon, he had only to observe, that cases of stricture occasionally occurred in this metropolis, in which surgeons of the highest rank not unfrequently failed in passing an instrument into the bladder. He could readily conceive it possible for Mr. Syme, with a very small grooved director or sound, gradually to find his way to the bladder; but it appeared to the author that such an instrument would be more likely to pass by the side of the obstruction, where there is least resistance, than through it. The author concluded his subject as follows:—"Although in these observations he had dwelt more particularly upon the use of caustic than on other means, well knowing that much unjust prejudice prevails against that remedy, it had been especially his object to avoid advocating any one method of treatment exclusively. It cannot be expected that the surgeon who adopts a particular mode of treatment in all forms of urethral obstruction will meet with the same degree of success as one who, having a variety of resources at command, is enabled to select that which will be most suitable to each individual case. Dilatation will probably effect a permanent cure of stricture in its early stage before there is much induration. That method, when properly conducted, will also prove successful in the relief or cure of a great majority of strictures, notwithstanding the existence of much gristly hardness at the seat of disease. In such cases however, there will be more or less tendency to re-contraction, for although the bougie may dilate the constricted channel to its healthy calibre, as indurated tissue is not easily removed by the absorbents, the obstruction will commonly return, unless prevented by an occasional introduction of instruments, the use of which may sometimes be necessary during the patient's lifetime. Caustic, when judiciously

used, will often prove highly serviceable in facilitating dilatation; and in many cases, he knew that the application of potassa fusa would be successful in the entire removal of the disease. It is, however, in the treatment of obstructions impermeable to instruments that, in his opinion, consists the indisputable value of the caustic alkali, as it had enabled him to succeed in the relief or cure of many cases, in which dilatation had failed, after long trial, in very skilful hands, and when the only hope held out to the patients was perineal section,—an operation which, he repeated, should never be performed, whilst there remained a single chance of a successful result from less hazardous measures. He begged that these observations on perineal section might not be misunderstood; for although he had used his best endeavours to dissuade surgeons from having recourse to its performance, except in the very few cases that cannot otherwise be more safely relieved, it had been far from his intention to say anything in disparagement of operative surgery, which, when ably and judiciously employed, amply merits, and will ever obtain, the admiration of all who can appreciate the untiring industry and high mental qualifications necessary to form the accomplished operator. By gentleness and perseverance, however, in the means which he had ventured to recommend, in bad cases of stricture, the surgeon may rest assured he will generally be successful, without resorting to the knife. It is true, that in the unostentatious exercise of his art, he cannot hope to obtain that applause, which the dexterous performance of an operation is sure to excite, yet his reward will be no less enviable, and far more lasting—an approving conscience.

Mr. Childs had not had any experience in the treatment of stricture by potassa fusa, having always found the use of nitrate of silver attended with every success, even in an instance of impermeable stricture, which had existed twelve years, and had prevented his patient marrying. The stricture was ultimately thoroughly cured. The remarks made respecting false passages, and the caution requisite to prevent the armed bougie entering them were very important, but other risks were to be encountered. He recollected the case of an old gentleman, who had enlargement of the prostate, which was mistaken for stricture, and freely cauterised by his medical attendant. He had heard and seen so much of the sad results of perineal section, that he should be very unwilling to try it. The best plan of treating a stricture was, he thought, by dilatation, and with due patience and perseverance the surgeon will generally succeed in effecting a cure. If not, and an operation be necessary, he should prefer Brodie's modification of Stafford's proceeding.

Mr. Hancock was of opinion Mr. Wade had not dwelt enough on the medical treatment of stricture. He had confined his notice to the surgical applications, and had neglected alluding to those cases in which constitutional treatment was requisite. He considered that practitioners were too prone to interfere mechanically with these parts, and mentioned cases in which mechanical measures had been had recourse to wrongfully, inducing hæmorrhage and other mischief, the cases being afterwards cured by constitutional remedies. A gentleman, whose life was a burden to him from the state of his urethra, he being able to pass water only by drops, had an intense dread of the use of instruments. The pulse was intermittent, rapid, and small, and the face presented the peculiar expression attending St. Vitus' dance. He (Mr. H.) ordered the shower-bath, horse exercise, and the muriated tincture of iron. His patient, a fortnight after, could pass water without the slightest difficulty. He could mention other cases where the use of instruments had aggravated the disease, and abstinence from them, and the exhibition of medicines, had effected a cure. There were other cases not noticed by Mr. Wade; those in which the use of small bougies induced hæmorrhage, while the larger ones passed readily. These patients were flabby, doughy, with relaxed muscular fibre, and passed their water by drops only. He had reason to be satisfied with potassa fusa in stricture; he was at first prejudiced against it, as he believed it was so diluents that it would cause ulceration, and more mischief than the original disease. His fears, however, were only theoretical, and vanished before experience. A naval officer had been sent to him lately from Haslar, for him to perform Syme's operation on him. The canal was in an exceedingly irritable state; but as he found he could pass a No. 2 or 3, he declined opening the perineum. He did not think it right to expose the patient to such great danger, when he could pass an instrument into the bladder. He accordingly employed a No. 7 armed bougie successfully, but failed afterwards, when he attempted to use an unarmed instrument. He then repeated the application of the armed bougie, and afterwards succeeded in passing other bougies, under the influence of chloroform. The irritability of the canal having been subdued by the potassa fusa, the size of the instruments was

gradually increased, and the patient finally got well. He (Mr. H.) thought, that in treating stricture, the profession was too prone to leave off passing instruments too soon. They should persevere until as large an instrument as will pass through the urethral orifice can be got into the bladder. He generally found he could go as far as No. 14, and when he could do that, he showed the patients how to use a No. 12 for themselves, which he advised them to pass once a week for several months, and he rarely found that they had a relapse.

Mr. Henry Smith thought that the Society was indebted to Mr. Hancock, for having so candidly avowed his former prejudices against the potassa fusa, and his present conviction in favour of the agent. He himself had had several opportunities of using it, and his experience was favourable to its employment. One of the arguments used by some against potassa fusa was, that it caused severe retention of urine; he should be glad to hear from Mr. Wade if such a circumstance had occurred much in his hands. In one case which he had under treatment, severe retention of urine had occurred, when a bougie or catheter was passed; in fact, it happened on two or three occasions; but he applied potassa fusa four separate times within little more than a fortnight, and no retention took place after either application; on the contrary, the irritability of the bladder previously existing, was much diminished. Another occurrence which might take place was, the disengagement of the potash from the bougie; in one instance of permeable stricture where he used it, this happened on withdrawing the bougie, and it caused the patient intense pain for a short time; but as soon as he had discovered, what, he confessed, resulted more from his own awkwardness than from anything else, he relieved the man by pushing the particle backwards into the bladder. From his own limited experience, he was decidedly in favour of the use of potassa fusa in some forms of stricture, and he felt himself much indebted for the valuable information he had received from Mr. Wade's book on the subject.

Mr. Gay said, that Mr. Wade's practical paper would tend to remove much of the prejudice against the application of caustic to the mucous membrane of the urethra. He believed that the employment of the bougie was not always attended with the expected good results. Every medical man must have met with cases, where, after using the instrument for some time, and advancing considerably, as he supposed, towards a cure, he had been suddenly foiled; the case has retrograded, and become as bad as ever. This is of not unfrequent occurrence in the treatment of this disease, and he was, therefore, glad to hear the paper which had been read respecting the use of potassa fusa in stricture. He had not tried it himself, but after the evidence that had been given in its favour, he should not hesitate to do so. He would wish to ask Mr. Wade how the potassa fusa acted? Was it by destroying the tissues? If so, a sore, an ulcer in the passage, would be the result; and then, unless the canal were kept patent by instruments, the case may be rendered worse than it was before the caustic was applied. The use of a very large bougie would, in that case, be necessary, not to make, but to maintain the passage patent. His practice in cases of distended bladder, and of stricture of some standing, rendered impermeable after a debauch, when it was found an instrument could not be passed, was to puncture the bladder. If the attempt to pass the instrument be persisted in, false passages may be formed, and very serious disease be induced by the alteration of structure of the parts. The bladder, and the other organs concerned, were in a state of inordinate action from distension, and in a condition unfavourable for success in catheterism. In this extraordinary state of excitement of the parts, he considered the best plan to be adopted, was to relieve the bladder of its contents by puncturing that viscus, when the urinary organs will return to their ordinary condition, and the patient will do well. Puncturing the bladder is an operation unattended with danger; it was true that it was condemned by Liston, but he (Mr. L.) performed the operation very soon after he had condemned it. The danger of wounding the peritoneum is the greatest objection to it; but if the operation be performed with care and attention, there is no reason why that accident should be dreaded. He (Mr. Gay) had performed this operation on persons of every age. Mr. Wade had referred to a case of his, in which he said that he (Mr. G.) had performed perineal section. [Mr. Wade here interrupted Mr. Gay, and read an extract from the paper, showing that the operation alluded to was not described as the perineal section.] Mr. Gay continued—The case in which he had cut into the perineum, was one of impermeable stricture, in which the instrument could not be passed within three inches of the bladder. It was not therefore Syme's operation, for in that it is necessary to pass the instrument into the bladder, before the urethra is opened. In his own case

he cut down upon the stricture, and laid it open, giving a free discharge for the urine. The man died from fever on the seventh day. Mr. Gay then referred to the instruments exhibited by Mr. T. H. Wakley, and stated that he himself had used them with success in a troublesome case of stricture under his care at the Free Hospital. He thought the silver tubes enlarged the passage, by a breaking up of the tissues, and not by dilatation. The bleeding was very slight, nor was there much pain or inconvenience. He (Mr. G.) believed that stricture would be treated by this plan more readily and more successfully than by any other.

Mr. Wade, with reference to Mr. Hancock's remarks on constitutional treatment, said that his paper was devoted to the consideration of permanent, and not of spasmodic, stricture, and furthermore, having read it in abstract, he could not enter into all the necessary details respecting every variety of stricture and treatment. These matters he had dilated upon in his work on Stricture, and to that he must refer them. The cases spoken of by Mr. Hancock were essentially instances of spasmodic, not of permanent stricture. The latter was, strictly speaking, a surgical disease. In those cases where a small instrument could not pass, but a large one could be used with comparative facility, he (Mr. Wade) did not think there was a permanent stricture, but low, perhaps chronic inflammation of the parts. He agreed further with Mr. Hancock as to the necessity that existed for dilating the canal to the utmost, nor would he part with a patient if he could help it, until this had been effected. He had rarely found retention of urine follow the use of the armed bougie, when applied with proper precautions. If the patient be subject to retention, he should recommend rest and quiet during the day, the application of potassa fusa in the evening, and then a full dose of opium. He would, under such circumstances, get the patient fully under the influence of opium. The accident alluded to by Mr. Smith, that of the caustic falling out of the hole in the bougie, had never happened to him. He used only a very small piece of potassa fusa, which he desired should dissolve upon the stricture. Mr. Gay had inquired whether the potassa fusa acted by destroying the tissues? When used in very small quantities indeed, it might act as a stimulant; in a larger piece, as a destructive. It is necessary to proceed very cautiously with the caustic, when there is but little adventitious deposit, but not so in the old, hard, gristly stricture. When the stricture begins to yield to dilatation, then the application of caustic may be given up. When retention occurs, the great point is to keep the patient under the influence of opium.

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THE INSTITUTE.

LONDON, SATURDAY, FEBRUARY 15, 1851.

TESTIMONY OF THE INSANE.

THE trial of SAMUEL HILL, for the manslaughter of a lunatic named BARNES, in Mr. ARMSBY'S Lunatic Asylum at Peckham, has resulted in his conviction; and this conviction has taken place principally upon the evidence of RICHARD DONELLY, another lunatic, an inmate of the same asylum.

Our readers may remember that, in a former article on this subject, we expressed a decided opinion, that RICHARD DONELLY, being capable of understanding the nature of an oath, was competent to be examined as a witness in a judicial proceeding. That opinion has been confirmed by two eminent judges, Mr. JUSTICE COLERIDGE and Mr. JUSTICE CRESS-

WELL; and although the question is further reserved for a Court of Appeal, we have no doubt that our view of the law will ultimately be found correct.

The legal principle being thus far established, it is important to inquire whether medical knowledge and mental science justify the opinion we have advanced. In point of law, an insane witness may be examined; this we will take for granted. In point of fact and experience ought an insane witness to be examined? This we can have no difficulty in proving.

Without discussing the various definitions of insanity, some of which, to use the language of an eminent writer, are "so narrow as to set at liberty half the patients in Bedlam, and others so loose and capacious as to give a straight waistcoat to half the world;" and without attempting any universal formula, which would embrace every species of mental unsoundness; one thing is perfectly clear, that the human mind is variously affected by infirmity and delusion, that one faculty or one set of faculties may be disturbed or impaired without disturbing or impairing others, and that a person under the influence of the most powerful hallucination upon a single topic may have the mastery of his senses upon every other. We must not be understood here to assert that a mind possessed with an insane idea upon one subject may not be weakened in its general functions by that single insanity; on the contrary, it is probable that every partial unsoundness exercises an injurious influence over the whole intellectual system, although too subtle to be detected by ordinary observation. All we rely upon is this, that a man may believe he is visited by a periodical spirit, and be a better arithmetician than Michael Cassio or the Chancellor of the Exchequer; or he may believe that his legs are made of butter, and yet be able to conduct with acuteness and regularity the traffic of a counting-house or a shop. It is on record in the annals of science, that a respectable tradesman fancied himself a seven-shilling piece, and requested his neighbours not to give change for him if his wife should present him in payment; and that a Bourbon prince fancied himself dead, and refused to eat, until two persons were introduced to him in the character of illustrious dead like himself, when, upon their invitation to dine with them, and another distinguished person, also deceased, he made a very hearty dinner. While the fancy remained, it was necessary every day to invite him to the table of some ghost of rank and reputation. Yet both the tradesman and the prince, in the common affairs of life, unconnected with their delusions, acted as intelligent and rational beings.

Let us see how far these general observations are borne out by the case that has originated them. On the trial of the keeper, HILL, Mr. J. T. BURTON, Medical Superintendent of Mr. ARMSBY'S establishment, stated in reference to RICHARD DONELLY, the proposed witness, that he "laboured under a delusion that he had spirits in his head,* but was quite capable of giving a rational account of any transaction that passed before his eyes, and that he had always found him able to give an account of anything that happened

* In our previous article, we stated that Donelly was labouring under the delusion that he had sometimes one butt, and sometimes two butts of beer in his stomach. We were led into this error by the reporter of the proceedings before the Police magistrate; we now find that it was the deceased, Barnes, who was afflicted with this delusion. Our argument cannot, of course, be touched by this blunder of the reporter; but it is as well to correct it.

to him; and he was always rational, except with regard to the delusion of having spirits in his head." This opinion exactly tallies with and confirms the general propositions we have attempted to maintain, and in order that our readers may perceive whether Mr. BURTON is warranted in the conclusion he has come to, as well as more thoroughly appreciate the effect of this remarkable incident in medical jurisprudence, we have obtained, through the kindness of a learned gentleman who was present during the trial, a more ample note of the preliminary examination of the lunatic, RICHARD DONELLY, than has appeared in our contemporaries. The answers which he gave to the questions put to him by the Counsel on both sides, and the Court, were nearly as follow:—

"I have a spirit, and 20,000 of them."
 'Those which ascend from my stomach to my head, are mine, and those which speak in my ears.'
 'I don't know how many.'
 'I think the flesh creates them from the nerves.'
 'They are all in my body and round my head.'
 'They speak incessantly, especially at night.'
 'I am taught from my infancy they are immortal; that is an article of my faith, no matter how faith goes; they all live after my death.'
 'They all, whether mine, or those from anybody else, live after death. Satan lives after death, so does the living God.'
 'They come from the dead and all living people; you, or other gentlemen, men or women, or the Queen, may have them.'
 'She often comes and visits me, though she is alive.'
 'I am an innocent man, and no evil spirit can possess me.'
 'Luther and Calvin, and those controversial spirits, come and visit me, but I think there is good in them themselves.'
 'The evil spirits are creatures of themselves.'
 'I do not know whether the spirits that visit me, have good or evil in them.'
 'They may direct me to do what is evil.'
 'They want me to evade my religious duties, and do others which I don't like.'
 'They speak to me incessantly, and are now speaking.'
 'They are incessantly around me, and discoursing me.'
 'I am flesh and blood. I am not a spirit myself.'
 'I go to the grave; the spirits live hereafter. I do not.'
 'Unless I have a gift different from my father and mother, which may be I have. You may put that in it, if you please.'
 '[This was said to the judge, whom he saw writing down what he was saying.]
 'When I am dead, my spirit will go to heaven, or may be to purgatory.'
 'I believe in purgatory.'
 'I am a Roman Catholic.'
 'I attended Moorfields, Chelsea Church, and a good many round land.'
 'I know what it is to take an oath.'
 'My catechism says, "Is it lawful to swear? It is when God's honour, our own, or our neighbour's good requires it." An oath is a justifying our neighbour upon a book, or an obligation.'
 'I appeal to God, when I take an oath, to assist me in justifying my neighbour.'
 'Perjury is mortal sin. The man who commits it will go to hell to all eternity.'

The judges then directed the oath to be administered to him, and he gave a coherent and straight-forward account of the circumstances which led to the death of his fellow lunatic, BARNES. The jury, and, we have reason to know, the judges also, were perfectly satisfied with the accuracy and the truthfulness of his narrative.

One phase of his evidence struck us forcibly. He was able clearly to distinguish between what the "spirits" or "creatures" as he sometimes called them, told him, and what he had himself witnessed. The spirits had insisted that the occurrence took place on a Tuesday, he on the contrary believed it took place on the Monday. So he told the Court; but when Mr. JUSTICE COLERIDGE asked him whether the

account he had given of the transaction was what he had himself seen, or what the spirits had told him, he at once replied—"My Lord, I have only told you what I was myself an eye-witness of. The spirits only went to make me believe that I was mistaken in the day, and that it was Tuesday instead of Monday, but I believe it was Monday." In this he was right, and here we have a direct process of the reasoning faculty; we have the mind resisting even the promptings of its supernatural visitors when opposed to its own conviction, and discriminating between their communications and the impressions derived from the senses. Any general rule which should declare a mind thus constituted, incapable of testifying as to what had come within the sphere of its observation, would not be allowed to prevail one hour after an exposure of its absurdity.

We now pause. Should it be necessary we shall resume this subject, and we have only to congratulate all who feel an interest in the condition and treatment of the insane, that our law has thus far thrown its protection around those who would otherwise be helpless, and recognised the principles of an enlightened mental philosophy.

ON OUR METEOROLOGICAL TABLES, CONNECTED WITH MEDICAL TOPOGRAPHY.

ONE of our fundamental objects was the investigation, to some extent, of the Medical Topography of England; and, from the beginning of this year, we have published weekly meteorological results deduced by Mr. GLAISHER, from observations made upon a uniform plan, by experienced observers, possessed of good instruments. The stations at which the observations are made, embrace an extent of country exceeding seven degrees in latitude, and of nearly seven degrees of longitude, and their heights above the mean level of the sea vary from 75 to nearly 400 feet. At many of these places the health of the inhabitants has been simultaneously recorded; and is it too much to expect that in the others, some few notes will be made by members of our profession, in private practice or otherwise, to assist in these inquiries?

Our list of places, up to the present time, has not included sufficiently those of the manufacturing districts; but this week it is increased by Southampton, Liverpool, and Manchester, and these towns have Boards and Officers of Health. We hope very shortly to receive, in addition, regular returns from Oxford, Grantham, and Holkham. Our tables give the means of comparing the statistics of health in different places with those in other localities simultaneously made. The results from the Islands of Jersey and Guernsey may be compared together, and both with those of Cornwall and Devonshire, and the latter with places nearly in the same parallel of latitude. All places situated near the sea must be contrasted with those inland; as also the results from places differing in elevation only; in soil; in latitude; in longitude; manufacturing with agricultural; and season with season.

At all the stations there should be a sufficient record of diseases as regards local influence, that the different stages of an epidemic, as its generation, growth, maturity, decline, and disappearance, may be arranged with the tables, marking the variations in temperature, pressure, and hygrometrical conditions and changes of the atmosphere; and thus, by a careful examination of medical and meteorological observations, we shall be able to ascertain those conditions of the atmosphere which have an influence so great as to be detected.

The difference of readings of the barometer always exerts considerable influence on the health of man, and this becomes very evident, even in salubrious seasons, on great masses of men. Our tables give the particulars of pressure, temperature, and moisture of the atmosphere, with those of the daily directions of the wind, and the fall of rain. The information with respect to temperature is full, as doubtless the development of different diseases is very much dependent upon its ranges, and thus the variation of temperature between the day and night becomes of great importance, as it may explain why so many persons are seized with illness in the night, and also why disease is frequently induced by a cold night following a hot day, and the number of deaths which occur at about sunrise, may be owing to this being the coldest time of the day.

The different degrees of temperature of the air, its purity, pressure, and movements, together with the fall of rain, the amount of water mixed with the air in the invisible shape of vapour, are different in different places, and it is by the different combinations of these elements that climate is formed; and every different climate has its own peculiar influence on organic bodies exposed to its operation. It will be seen by reference to our tables, that the climates of places situated near each other are very different; at present we need only mention the marked difference between those of the islands of Jersey and Guernsey, as specially noticed in our remarks upon the weekly tables, in consequence of which Dr. HOSKINS, F.R.S., in a letter to Mr. GLAISHER, says:—

“The great difference in the mean daily range of temperature between this island and Jersey is no less true than strange. I have long been aware of the difference of climate in these near neighbours; Jersey partakes more of a continental climate than we do, its summer being much warmer and its winter colder than ours, although the mean temperature is nearly alike. For instance, last winter we had no snow and no frost. In Jersey there were frequent falls of snow, and the temperature was so low that water froze in bed rooms, even in well-built and appointed houses, a circumstance which with us is almost unknown, even in severe winters.

“The reason for this difference depends probably on the circumstance that the declination of Jersey is to the south, that of Guernsey to the north; the sun has therefore more power in the former than in the latter island. The only wind which brings us anything like what we call heavy snow, is the south-east, which blowing over France is intercepted by Jersey, its transit over which and over the intervening sea, render it comparatively warm before it reaches us. Whenever I hear of severe cold early in the winter in the south of France, I generally conclude that we shall have cold south-east winds and snow in March; this was remarkably the case in 1845.”

From the great difference thus found to exist between the climates of these two islands, we should naturally anticipate a corresponding difference in the returns of health and mortality.

The influence of atmospheric phenomena on health and disease is a difficult subject to investigate; yet, if practitioners would systematically note the changes in atmospheric phenomena conjointly with disease, and particularly when it is on the increase or decrease, a series of observations would thus be supplied, from which useful practical deductions may be made. In our weekly Meteorological Tables for different parallels of latitude, a means is given to gentlemen possessed of instruments, whereby they may in some measure test their accuracy; and in the event of medical facts alone being noted, this table will supply the leading atmospheric phenomena, which may be used in the discussion of their observations.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CXLVIII.—CHLOROFORM, ITS USES, DOSE, AND MODE OF ADMINISTRATION.—Since its discovery, chloroform had been more or less used on the Continent and in America in the liquid form as a sedative, but was very little employed in this country. The chief diseases in which it had been administered with benefit, were asthma, spasmodic cough, and cancerous and other painful affections; in cancer, it is most highly praised by Mr. Tuson, of London, but general experience has not confirmed his extravagant statements. More lately it has been given with good effect in obstinate vomiting, in asthma, and in hysteria; it has also been employed in the treatment of spasmodic cholera. Externally applied, it allays pain and local irritation, and is therefore used with good effect as an addition to liniments or ointments in neuralgia, muscular rheumatism, and cutaneous diseases, attended with itching, especially prurigo, and lichenoid eruptions; it may also be applied undiluted in these affections. But it is for its effects when inhaled in the form of vapour, that chloroform has become so important a therapeutical agent. Towards the close of the year 1846 the discovery was made in the United States of America, that a state of partial coma with insensibility to pain, could be produced by the inhalation of the vapour of sulphuric ether; and this discovery was rapidly taken advantage of, for the purpose of preventing any suffering to the patient during surgical operations. It was almost immediately found, however, that ether inhalation was very uncertain in its effects, producing in many persons violent excitement, spasmodic action of the muscles, and delirium, and in some instances death even followed its employment. The attention of the members of the profession, over the whole globe, I might say, was therefore at once actively engaged with the view of discovering a safe and effectual substitute for it; the honour of this, one of the most important discoveries of modern times, fell to the lot of Professor Simpson, of Edinburgh, who, in November, 1847, ascertained that chloroform possessed the desired properties. The vapour of chloroform when inhaled in quantity not exceeding that evolved by half a drachm, produces a feeling of fulness in the head, dizziness, and partial loss of consciousness, with usually pleasurable sensations; the effects vary according to individual temperament, but in all they more or less resemble semi-intoxication. If the quantity inhaled be augmented, total insensibility is quickly produced, usually in from thirty seconds to two minutes, the insensibility being marked by slight stertorous breathing, muscular relaxation, and fixing of the eyes. If the inhalation be now stopped, perfect consciousness will be restored, usually in from five or six minutes, the individual recovering without any remembrance of what had taken place. The circulation is but little affected during the state of anæsthesia, the strength of the pulse being generally diminished, while its frequency is increased. The anæsthetic condition may be kept up for hours with impunity, as is often done in childbirth, by a cautious continued use of the inhalation. The therapeutical applications of the inhalation of chloroform are sufficiently manifest, its effects being so fully explained above; but the two purposes for which it is specially used require to be shortly noticed, namely, the prevention of pain during surgical operations, and in childbirth. At first, much opposition was given to the employment of anæsthetic agents for the induction of insensibility during operations, and the occurrence of an occasional fatal case, even where chloroform had been inhaled with all due precautions, still affords its opponents an argument against its use; but the magnitude of the boon conferred is so great, and the proportionate risk of ill effect so small, that it is now used almost universally by surgeons in even the most trivial operations. There is one class of operations,—the reduction of dislocations, in which it not only prevents pain, but by its relaxing effect on the muscular system removes all difficulty in the reduction, so that the complicated apparatus of compound pulleys, &c., is no longer required. In the reduction of strangulated hernia, and in the introduction of a catheter in spasmodic stricture, its relaxing effects are also especially advantageous. In operations about the mouth and nose only is the production of anæsthesia contra-indicated, and this depends on the danger that might result from the flow of blood into the air passages during the insensible state of the patient. It is, however, to the use of chloroform during child-bearing that most opposition has been given, and a fierce controversy has raged between obstetrical practitioners on the subject, since it was first employed by Professor Simpson; scripture authority even being brought to bear on both sides of the question.

But as I am not myself a practitioner in midwifery, and consequently cannot speak from personal experience, I wish merely to deal with facts. In Edinburgh anaesthesia is induced—to speak in general terms—in every case of labour, natural or preternatural, and with safety to both mother and child; while the opinion of the majority of accoucheurs in this and most other large cities, as far as I can judge from what has been written on the subject, is well expressed in the following extract from the second edition of Dr. Churchill's *Midwifery*:—"As to its exhibition in natural labour, as I do not believe that in the large majority of cases convalescence is at all impeded by the suffering, I cannot see the necessity, or even the propriety of urging the employment of anaesthesia in every case; and I do feel that even greater caution ought to be used than in operative midwifery. We may be justified in running some risk when an important point is to be gained, such as perfect quietness during an operation, which we should not be justified in incurring merely to relieve pain; thus, in hysterical or nervous patients, in those labouring under nervous affections or organic diseases of the lungs or heart, &c., I do not think we ought to employ it." It is right, however, to add, that in no instance has a fatal result followed the inhalation of chloroform in midwifery practice. In conclusion, anaesthesia has been employed in the treatment of asthma, delirium tremens, hysteria, neuralgic affections, &c.: but our experience of it is too limited as yet to draw any conclusions as to its therapeutic value in these affections. In one case of hay asthma I have seen the access of the disease kept off by constantly smelling chloroform, which the patient carried about with him in a bottle for the purpose.

Dose and Mode of Administration.—Internally in the fluid form, min. v. to min. xxx. suspended in water by means of mucilage or dissolved in it with the aid of a little spirit; in consequence however, of its great volatility, it should always be prescribed in draughts: for external use f3j. to f3iv. may be mixed with half a pint of any liniment, or f3ss. added to 3j. of an ointment. *Anaesthesia* is usually produced by the inhalation of the vapour produced by from f3j. to f3ij. It is most effectually and safely administered in the manner first proposed by Professor Simpson: namely, by pouring the chloroform into the hollow of a handkerchief folded in the form of an inverted cone; at first f3j. only should be used, and if the desired effect be not produced in about two minutes, the same quantity should be renewed. Various forms of *inhalers* have been proposed for the administration of the vapour of chloroform, but I must confess that I prefer the simple handkerchief. The chief points to be attended to are:—1st, that the patient should be lying on his back with the head slightly raised; 2nd, that he should be permitted at first to breathe atmospheric air mixed with the chloroform, which is effected by not bringing the handkerchief too close to the mouth and nose at once; 3rd, that the vapour should be altogether withdrawn as soon as insensibility is produced, which is usually evidenced by the occurrence of slight stertorous breathing, for the condition can be kept up for any length of time that may be requisite, by the occasional reapplication of fresh chloroform in the handkerchief; 4th, the patient's stomach should be empty when the inhalation is commenced, as otherwise vomiting is apt to be produced; and 5th, should fainting or other evidence of sinking occur, the best restorative is atmospheric air; ammonia also may be applied to the nostrils, the cold douche on the head used, or even artificial respiration may be had recourse to, but no stimulants should be given by the mouth. There is but one other remark which I have to make for the benefit of those inexperienced in the use of chloroform, namely, that during the process of inhalation, just before insensibility is produced, there is usually a struggle on the part of the patient; this must be resisted, and the charged handkerchief kept just at that time closely applied to the mouth and nostrils.—*Medicines, their Uses, and Modes of Administration*, by J. Moore Nelligan, M.D. Third Edition, 1851.

CXLIX.—CASE OF STRANGULATED HERNIA.—By JOHN TRAILL, Esq., Surgeon to the Arbroath Infirmary.—Wednesday, January 1st, 1851.—This morning, at five o'clock, I was requested by my friend, Mr. Finlay, to visit David Shuld, a seaman, aged 60, who had been brought ashore from a ship, about four hours previously, with all the symptoms of strangulated hernia. Mr. Finlay had seen him shortly after he reached his home, and had made a persevering attempt to reduce the hernia, but without effect. The man's statement—which was rather confused—was, that for many years he had laboured under hernia, for which he had worn a truss; but that the tumour frequently came down, and was returned on several occasions with difficulty, and after having caused symptoms resembling his present attack; that on Monday forenoon (December 30), feeling costive and unwell, he

had taken a dose of castor oil, which had acted three times; that the same evening, about nine o'clock, whilst engaged in the ship's rigging, he had felt the tumour come down suddenly; that he immediately became sick, and vomited, and had been in great agony ever since.

He was evidently in great pain, his pulse small and wiry, the whole surface of the body cold and damp (he had not been able to change his wet clothes for two days and nights before coming ashore); but his countenance was not much sunk, nor his muscular strength much lessened. The belly was hard, tense, and tympanitic; but without much tenderness on pressure. He complained of intense sickness, and had frequent retching and vomiting of bilious-looking matter, with dragging pains about the navel, and constant thirst.

The hernial tumour occupied the right side of the scrotum, and was fully the size and about the shape of a *Bon Chretien* pear, of twelve ounces or a pound weight, having the testicle at its lower part, and feeling very tense, but with no great degree of tenderness.

We placed him under the full influence of chloroform, which produced complete relaxation of the muscular system, and the taxis was again tried. At first it seemed as if the tumour would be easily reduced, a considerable part of its bulk apparently passing up, but immediately returning on the withdrawal of pressure.

He was now directed to be sent to the infirmary, and placed in the warm bath as soon as possible.

About nine o'clock he was seen by Dr. Bruce, who, after keeping him for about half an hour in the bath, again placed him under chloroform, and attempted reduction, without effect.

At ten o'clock, the symptoms continuing unmitigated, it was resolved, in consultation, to operate. On cutting through the integuments, the fascia and cellular substance were found much thickened, matted together, and infiltrated with serum, and at several points with air. The sac was strongly and uniformly adherent to the parts around, was very tough, and much thickened, being at no point less than a line, and at one part at least half an inch, in thickness. On making a small opening into it, a stream of yellow, turbid, and very fetid fluid was thrown into the air with great force, and this continued to flow until at least ten or twelve ounces were discharged. On a careful examination I now became convinced that the sac was empty, at least of any solid body; and, on introducing a director through the opening, it passed without any obstruction through the inguinal canal into the abdominal cavity. From these circumstances, and the large quantity and nature of the fluid passed, some of my colleagues were of opinion that the part opened might prove to be intestine.

Although satisfied in my own mind, from the colour, density, toughness, great and unequal thickness, and uniform adhesion to the fascia, that the part opened must be the sac, yet, being also satisfied that it contained neither omentum nor intestine, it was agreed to place a ligature on the small opening, and, after closing the wound with sutures, to wait for some hours the result.

In the evening—no relief having resulted from the operation—the wound was opened up and the sac cut into, which, from its structure and smooth serous surface, was now evidently seen to be thickened peritonaeum. The finger could now be passed without difficulty through the neck of the sac into the abdominal cavity, and there encountered what felt like a mass of omentum, and adhered slightly to the peritoneal surface.

The man died the same evening, about ten o'clock, after having vomited a large quantity of stercoraceous matter, and without any abatement of his sufferings.

On opening the body next day, we found the appearances usually presented after death from hernia,—considerable effusion of turbid serum, the intestines agglutinated together by soft fibrinous matter, and the whole abdominal viscera indicating, in greater or less degree, the existence of inflammatory action. Immediately corresponding to, and lying loosely over, the internal orifice of the sac and inguinal canal, was a portion of the ileum, in a completely sphacelated state, about three inches in length, and its margin sharply and regularly defined, so as to indicate accurately the line of constriction. The serous surface of this part had lost its smoothness and elasticity, and the mucous membrane was soft and pulpy, and so much thickened as completely to close up the canal. Above this part, the intestine was, as usually seen, enormously dilated.

Remarks.—The opinion which I formed of this case at the time of the operation, from the phenomena which presented themselves during its progress, was, that the part strangulated must have passed up during some of the attempts at reduction; but that the morbid action was so far advanced as to have prevented any relief being derived from the removal of the strangu-

lation. This view, I think, the *post-mortem* examination proves to have been correct.

It was also evident, from the appearances presented both during the operation and on dissection, that the hernial sac had been irreducible for a long period, probably for many years; and, on minutely inquiring into this, we found that, although a strong circular truss had been constantly worn up to the commencement of the attack, the right side of the scrotum had always remained considerably enlarged.

The constant pressure of this strong truss over the unreduced sac will also account for its strong adhesions to the fascia, and for the congested and infiltrated state of the surrounding cellular tissues. The circumstance of our being able, during the attempts at reduction, to lessen considerably the bulk of the tumour, led probably to a longer delay of the operation than would otherwise have been the case.

The more I see of hernia, the more strongly am I convinced that all danger lies in delay; from the operation itself I have never seen the smallest danger result.

Notwithstanding this apparent reduction in bulk during pressure, yet the instant pressure was withdrawn, the tumour resumed its former size, and at the time of operation it was as large, and felt as tense as it ever had been. This, and the persistence of all the symptoms, rendered it impossible to suspect reduction of the strangulated bowel. — *Monthly Journal of Medical Science*, February, 1851.

CL.—EXTIRPATION OF THE GLOBE OF THE EYE. BY AUGUSTUS PRITCHARD, ESQ., Surgeon to the Bristol Royal Infirmary.—James Fleming, aged about 46, admitted September 22nd, 1850, was formerly a workman in some iron foundry in Monmouthshire, where he met with an accident, thirteen years ago. He states that a piece of iron entered his left eye, and has never been extracted. He has lost his sight for many years: and the constantly recurring inflammation in the injured eye has kept up so much sympathetic irritation in the right that he has been for a long time disabled from gaining his livelihood by his own exertions. For nine months he has been suffering from constant pain and sleepless nights, and his general health has accordingly suffered. His eye is intensely red, and the lids swollen; and he continually complains that he feels the foreign body rolling about from one side of the eye to the other. He is also quite unable to use the right eye, from the great intolerance of light. The iris of the injured eye is tremulous.

He became at first a patient at the "Bristol Dispensary for the Cure of Complaints in the Eye," many months ago, when, after careful attention to the case, I refused to make any attempt to remove the foreign body which he fancied was still there. He returned after three or four months' absence with the same symptoms, but there was a small black point in the sclerotic immediately below the cornea. Thinking that this might be the iron presenting itself externally, I made a section upon it, but discovered that it was merely a point where the sclerotic had become thinned. A considerable quantity of fluid and brownish vitreous humour escaped, and the eye appeared partially collapsed for a few days, after which pain returned, and the only difference observable in his eye was, that the pupil was distorted and drawn downwards towards the opening which I made.

A second attempt to cause the eye to collapse was made some weeks afterwards, when he was admitted an in-patient at the Bristol Royal Infirmary. Upon this occasion I removed a considerable flap of the cornea, and passed in a curette, to endeavour to remove the lens, if it was still there. The vitreous humour escaped as before, but no lens was to be felt.

The symptoms still remained in all their severity, and as he was extremely anxious to have something more done for him, I proposed, as a last resource, the removal of the globe of the eye. This was agreed upon in consultation, and he willingly consented; and I performed the operation in the usual way on the 14th of October, the patient being under the influence of chloroform. There was but little hæmorrhage; and after applying a twisted suture to the wound in the external canthus, he was removed from the operation-room, still in an insensible state. He recovered his sensibility about half an hour after the operation, two drachms of chloroform having been used.

15th. Has slept but little; feels no pain.

16th. Has had no pain whatever since the operation. Removed the pin from the outer canthus, the wound being healed.

17th. Is up and well; the right eye is becoming strong; there is a little sanious discharge from the left orbit.

23rd. Went out quite well, his right eye being quite strong, and the sight good.

The following appearances were seen upon examining the eye that was removed:—

The globe of the eye of a natural shape; the muscles healthy as far as they were removed; the anterior chamber healthy. The wound made in the cornea in a previous operation has partially united, through the medium of a rounded mass of dense white lymph. The pupil had regained its circular form. Ciliary body healthy in appearance. Upon exposing the posterior part of the eye, considerable changes were visible. The retina was sound, the lens had disappeared, and the capsule was collapsed, hard, and opaque, occupying the lower part of the eye, pressing against the ciliary processes. No foreign body was to be found. A thick and firm layer of fibrin separated the sclerotic and choroid throughout their entire extent, and upon the outer side of the globe of the eye there was a deep oval cavity as large as a dried horse bean, and of a very similar form, situated in the middle of the fibrinous exudation. This was, in all probability, the cavity of an abscess, although when I made the section through the eye, immediately after the operation, and before I carefully dissected it, I observed no escape of pus. Passing through this little space were two fine cords, one larger than the other; these were a ciliary nerve and artery, which, having traversed the sclerotic, were dragged out of their natural position, or elongated by the gradual separation of the surfaces of the choroid and sclerotic, and thus appeared like two little pillars connecting the opposite walls of the little cavity. The choroid itself appeared healthy, and of its usual brown colour.

This case is interesting as being the first recorded instance, as far as I can discover, in which extirpation of the globe has been performed for a disease of the eye which is not malignant, and I should scarcely have proposed so severe an operation if it had not been possible to remove all suffering by means of chloroform. It is also most satisfactory as far as the result is concerned, for, from the changes that had occurred in the eye, it is quite clear that no other means could have removed or cured the disease, and the freedom from pain which the patient enjoyed from the time of the operation was complete. The cause of the intense neuralgic pain which he suffered was, in all probability, the irritation of the ciliary nerve, kept in a state of tension as I have described, and the existence of the lymph between the sclerotic and choroid, with the abscess in the centre, was quite sufficient to account for the constantly inflamed condition of the eye. I should think that, with the aid of chloroform, a similar operation might be performed in many instances with advantage, in incurable inflammation of the interior of the eye, when the sight has been permanently lost, and when the sound eye is endangered, as it undoubtedly is, by the disease of the other. — *Provincial Medical and Surgical Journal*, February, 1851.

CLL.—COMPOUND FRACTURE OF THE FEMUR, EXTENDING INTO THE KNEE-JOINT; SECONDARY AMPUTATION; DEATH.—William D—, a labourer, aged forty-four years, a stout man of a florid complexion, and who had always enjoyed good health, was admitted into St. George's Hospital, under the care of Mr. Tatum, November 28, 1850. The patient was riding on the outside of a hearse, when, on crossing Putney Bridge, the vehicle upset; he was thrown under it, in what manner he could not say, as he was too much stunned by the fall to have any recollection of the particulars. He was immediately removed from under the hearse, and on attempting to get up, he found it impossible; he also perceived that his thigh-bone protruded through his trowsers, and that hæmorrhage to a small amount had occurred.

The patient was brought to the hospital with very slight symptoms of collapse, and Mr. Tatum not being at home when sent for, Mr. Hewett saw the accident for him. On examination, a wound three inches long was observed at the lower fourth of the thigh, running in a transverse direction, and the lower end of the upper fragment of the femur was projecting externally for the extent of about three and a half inches, riding over the lower fragment. The protruding portion of bone was very oblique in its fracture, and somewhat comminuted. A careful examination, as far as was practicable, was then made of the state of the lower fragment, but no fracture leading into the joint could be detected; the condyloid portion of the bone presented its natural shape; no motion could be produced between the two condyles, and little or no swelling could be made out in the joint itself. The patella appeared, however, somewhat looser than natural, but no œdema was seen in any of the parts surrounding that bone.

An attempt was made to reduce the protruded fragment, but as this failed, Mr. Prescott Hewett removed, by means of a fine saw, a portion of the projecting bone, after which measure the reduction was effected without much trouble. The finger having been passed into the wound, it was ascertained that the lower

fragment was somewhat comminuted, but still there was no evidence to prove that the fracture extended into the joint, and the patella was at this time no longer looser than natural. Under these circumstances, it was determined by Mr. Tatum, who had now arrived, and by Mr. Hewett, that an attempt should be made to save the poor fellow's limb. The patient was therefore put on an Earle's bedstead, the wound lightly dressed, and some side splints adapted to the thigh.

On the fifth day, the thigh, which until then had looked well, was found to be somewhat swollen, and it presented at the upper and inner part a large dark patch, of a bistre colour, looking much like incipient mortification of the skin, but the wound itself presented nothing remarkable. In the absence of Mr. Tatum, who was indisposed, a consultation was held by Mr. Hawkins and Mr. Hewett, when it was ascertained that there was some foul suppuration in the neighbourhood of the injury, attended with sloughing of the cellular tissue. Taking the general state of the patient into consideration, as well as the appearances about the limb, it was determined, as a last resource, to perform amputation. The patient having been rendered insensible by chloroform, the operation was at once performed by Mr. Hewett, and two incisions were subsequently made into the discoloured portions of the skin at the side of the stump. During the dressing of the wound, foul pus was observed to ooze out in small quantities, but it was not clearly ascertained whether this came from the femoral vein itself, or from the cellular tissue surrounding it.

On examining the injured parts, the following appearances were observed: lymph and pus were extensively infiltrated in the subcutaneous cellular tissue at the upper part of the limb, encroaching more on the inner and outer parts than on the anterior and posterior ones. The fractured portions of bone were bathed in unhealthy pus, and the crureus and rectus muscles extensively lacerated. Both fragments were comminuted, and in the lower one a fissure was discovered running into the joint through the intercondyloid notch. Still the fragments were so firmly held together, that no movement could be produced between them, and the only displacement which was observed was that of the outer condyle being a little in advance of the inner one. Thus these processes, instead of presenting a smooth surface at the intercondyloid groove, were marked by an uneven ridge; a small piece was chipped off from the internal condyle, but it was still firmly connected with the remainder of the bone.

In the remarks made by Mr. Prescott Hewett after the operation, he observed that compound fractures of the thigh were at all times to be considered as injuries of the most dangerous character, and the more so when they were situated in the vicinity of a joint. These cases often involved the question of immediate amputation. In the present case, no operation had been resorted to in the first instance, as the soft parts were not much lacerated, as no large vessel had been injured, and above all, because there was no distinct evidence to prove that the knee-joint was implicated. Though the fracture was a comminuted one, the fragments were not detached from the neighbouring parts, and under these circumstances, even if the case proved fatal, he (Mr. Hewett) thought that the right course had been pursued in giving the patient a chance of saving his limb, especially when it was considered that immediate amputation of the thigh is, in such cases, a most hazardous operation.

Mr. Hewett directed the pupils' attention to one point evinced by the dissection—viz., the slight ridge found in the intercondyloid groove, resulting from the partial displacement of the outer condyle, which ridge might serve as a means of diagnosis as to the extension of the fracture into the knee-joint. At the time of the accident Mr. Hewett had observed, after the reduction of the fracture, a grating sensation produced in moving the patella in its condyloid groove; but in the absence of all other proof of injury to the joint, he had attached no great importance to this fact. Mr. Hewett then mentioned that there were preserved in the museum of the hospital some preparations illustrating the splitting of the condyles of the femur with but little displacement; the actual nature of the injury not having been detected during life.

The patient towards night became very weak: he was continually retching, the effort seeming to give him much pain. Delirium soon came on, and it required four men to keep the patient in bed; he gradually sank, and died at a quarter before ten, the day after the operation.—*The Lancet*, February 8th, 1851.

CLII.—ON THE PHYSICAL EXAMINATION OF THE ABDOMEN, AND THE PALPABLE SIGNS OF DISEASE.—By CHARLES J. B. WILLIAMS, M.D., F.R.S.—*Examination of the Abdomen by Palpation.*—The method of palpation of the abdomen is a subject of

importance, and demands a few directions and cautions. The parts of the hands best qualified to feel are the palmar surfaces of the fingers, the pulpy portions of the last phalanx being endowed with the finest touch. But they should be flatly applied, at least at first; as nothing is more likely to start the abdominal muscles into rigid contraction than to poke them abruptly with the ends of the fingers. For the same reason the observer should not be too much above the patient; and if the bed on which the patient is placed is low, the practitioner should sit or kneel beside it, in order to bring his arms and hands more on a level with the abdomen. It is equally obvious that the observer's hands should be comfortably warm; not only for the sake of the patient, but also because the touch is more sensitive in that condition. The posture of the patient generally best suited for examination is the supine, on a mattress or sofa, with the limbs lying straight, but without the least straining or muscular effort. It is often recommended to draw up the knees in order to relax the abdominal muscles; but this action is very apt to produce just the contrary effect, and further interferes with the free accessibility of the lower parts of the abdomen to the observer's hands. It is the great object, that whilst the body and limbs are so equally and completely supported as to be in a state of perfect relaxation, the whole abdomen shall freely admit of the application of the hands to every part, and in every direction. This further suggests, that in all cases requiring nicety in manipulation, the abdomen should be laid bare, the clothing sufficiently put out of the way, and that either the bed be narrow enough, or the patient be moved to each edge of it, so that the observer may be able, if necessary, to examine from both sides; this is especially requisite in the deep palpation to be described further on.

The kind of tact by which the different properties of *shape*, *softness*, and *hardness*, *elasticity*, *weakness*, &c., are distinguished, is so instinctive as scarcely to be capable of description; but it may somewhat guide a novice to say, that we trace the *shape* by applying the flat fingers and gently rubbing them over and between the prominences and depressions. We test the *softness* or *hardness* by pressing gently with the pulpy surfaces of the last phalanx on the successive parts over which the hands are passed; that which readily yields being soft, whilst the hard resists the pressure; the *elastic* opposes to it a spring, which, although yielding to strong pressure, sensibly pushes away the fingers as their application is relaxed. *Weight* is felt by lifting upwards a part, and observing what force is required to do this, and with what force it presses down again on the fingers as they are slightly withdrawn: trying the weight of part of the abdomen can be practised only in the lumbar and lateral regions in the supine posture; the anterior regions may be in a measure lifted and weighed by the hands, when the patient lies on his face, or sits leaning the body forwards; and this kind of examination is often of much importance in the diagnosis of ascites and solid visceral enlargements.

In the healthy state, the abdomen is in every region soft and moderately elastic; it feels smooth and uniform to the hand rubbed gently over it; when pressed superficially or deeply, its resistance is elastic and increasing with the pressure; when percussed on one side, no shock or fluctuation is felt on the opposite side; the different parts, when lifted, feel pretty equal in point of weight. This uniformity of soft elasticity represents the intestinal canal in its normal state, containing a moderate amount of gaseous, liquid, and semi-solid matter, pretty uniformly distributed through it. As observed by inspection, so slight prominences may often be felt, corresponding with the stomach, the cœcum, and occasionally below the umbilicus; but these also feel soft and elastic as other parts, and do not detract from the generally equable character of the healthy abdomen.

Variations from this normal state of the abdomen may arise from alterations in the walls; and it will be well to advert to these before describing those caused by disease of the interior. Excess of fat gives a fulness which will feel firm and elastic, or soft and flabby, according to whether it is on the increase or on the decrease; but it may be known to be fat by its peculiar lumpy feel on the surface, so that it may be pinched up by the fingers and thumb; and in this way the thickness of the layer may be estimated. In the case of very fat paunches, there are masses of fat also in the omentum and mesentery; these form the large-rounded prominence of the *pot-belly*, which renders the palpation of the abdominal viscera very difficult. In order to reach them in such a case, it is necessary to press firmly into the fat, and then to feel by moving the hand in a circular, or backward and forward direction; this may best be accomplished in the iliac and hypogastric regions, where the fat in the walls is not so thick as in the central regions of the abdomen. Where a corpulent person has lost much flesh, which is often the case in chronic disease, the loose flabbiness of the pendulous abdomen may embarrass the practi-

tioner; and the more so, as the fat which is left often has a granular or knotty feel, which might be mistaken for formations within the abdomen. These inequalities are to be distinguished by their being superficial, and capable of being grasped between the fingers and thumb; and the examination of the deep parts is to be effected by the hands steadily pressed inwards, pushing aside these inequalities, and rolling about or handling in divers ways the viscera underneath. Edematous walls are to be treated in a similar manner, and are distinguished by their inelastic boggy feel, and pitting on pressure.

Permanent tension of the abdominal muscles is a common impediment to the palpation of the abdomen; it causes a feeling of superficial hardness, especially in the direction of the recti muscles.* If there be any doubt as to its seat, it may be dissipated by keeping the flat hand steadily and firmly applied with increasing pressure for a few minutes, whilst the patient's attention is taken off by conversation on another topic. The muscles will then be found either to relax altogether, or so much to vary their degree of tension as plainly to reveal the cause of the hardness. This test is equally successful, whether the muscular tension be caused by nervous irritability, or by actual pain or tenderness; for even in the latter case, flat pressure, gently and very gradually applied, may be managed so as not to increase the pain.

Extreme flaccidity of the walls of the abdomen might be supposed to remove all sources of fallacy in the manual examination of the abdomen; and it is, in fact, an easy matter to feel the place, shape, and consistence of almost every abdominal viscus: yet under such circumstances it is not very uncommon to find the pulsation of the abdominal aorta mistaken for an aneurism, and I have known the anterior convexity of the lumbar spine mistaken for a tumour. These errors arise from the observers not being aware how deep in the abdomen the hand reaches, and would be readily corrected by placing the other hand behind the back, and by thus feeling how small is the distance between the two hands.

Palpable Signs of Disease in the Abdomen.—*Feculent accumulations* occur chiefly in the large intestines, and the lower part of the ileum; but the remaining portions of the small intestines are commonly more or less distended with gas. Hence the abdomen is generally enlarged; and the fulness feels more elastic around the umbilicus; and more resisting, yet not absolutely hard, in the iliac and hypochondriac regions. The course of the large intestine may often be traced; the greatest prominences being usually caused by the cecum and transverse arch; and, if the abdominal walls are not tense, it is quite possible, by the pressure of the fingers, to distinguish the feculent masses by their substantial but inelastic feel, from the tympanitic contents of other parts of the intestine. If the accumulation be considerable, there is a very appreciable difference in the weight of different parts of the abdomen, as tested in the mode before described. If there be an excessive accumulation of air in the intestines, this distends them so much that the feculent masses cannot be felt, and the whole abdomen has a tight elastic feel of rounded shape, but commonly showing more prominence in some parts than in others.

In *colic*, and constipation with severe *colicky pains*, there may in most instances be felt at parts, depression, corresponding with contracted portions of intestines, which are hard and knotty, in comparison with the tympanitic elasticity of other parts. The abdominal muscles are often spasmodically contracted over these painful parts; but they become eased and relaxed under the steadily increased pressure of the flat hand. In these cases the weight of parts of the abdomen, as tested by lifting them when the patient is in the prone or leaning forward posture, is less than usual; the contents being proportionally lighter, and prevented from ponderating by the tight contraction with which they are bound.

The *tympanitis* of low fever and sinking states, of paraplegia from destruction of the lower portions of the spinal cord, or serious injury to its reflex function, is distinguished by the more uniform and less tense elasticity of the abdominal enlargement. The deficient tone of the intestines and abdominal muscles in these cases causes a larger and easier distension; and although the quantity of air pent up may be much greater, the tightness and resistance is less than in *colic*.

The presence of *liquid in the peritoneal sac* is capable of altering, in various ways, the palpable qualities of the abdomen. The size and shape may be felt to be changed in the same manner already described as obvious on inspection:—that is, the size is more or less enlarged, with bulging projections in the most de-

pendent parts: the shape of the parts occupied with fluid is smoother, and more uniformly rounded than usual; and in extensive accumulations the surface may feel polished. But the resistance as felt by pressure is also distinctive: it is peculiarly soft, inelastic, and heavy. These qualities are most obvious where the abdominal walls are thin and flaccid; and under these conditions, there is no difficulty in detecting by the feel only, even moderate quantities of fluid in the abdomen. Ponderating to the most dependent parts, the fluid is to be felt in the flanks in the supine posture; at or near the umbilicus in the prone posture; in the iliac region when the patient lies on a side; and in the hypogastric region, when the patient sits leaning forward. The soft and mobile yet weighty feel of these dependent parts, is to be compared with the more elastic and lighter resistance of other regions occupied by air-filled intestines; and by making the patient change his posture, allowing two or three minutes to give time for the subsidence of the liquid, we may have the further evidence that it is free in the peritoneal sac, if we feel it still showing itself in the most dependent parts. It does not often happen that there is enough liquid in the intestines to give anything like the same superficially soft and heavy sensation under the fingers; and when there is, it may be distinguished by its not thus gravitating from one region to another, as well as by its giving less sensation of superficial softness, and more of a gurgling or elastic feel, from the presence of air.

In proportion as the quantity of fluid in the peritoneum becomes greater, the distension of the walls also increases, and hereby the softness of the abdomen is diminished, whilst the weight is more palpable. The liquid still gravitates in greatest volume to the lowest parts; but it also spreads more or less upwards in a layer between the viscera and walls of the abdomen; and gives a smoothness of surface, and uniformity of the peculiar weighty fluctuating resistance which characterizes its presence. So long as the distension is moderate, the air-filled intestines will usually float on the surface sufficiently to be in contact with the uppermost portion of the abdomen; and this will, of course, vary with the posture of the patient; that part can generally be distinguished by a delicate touch, which may be verified by the more obvious difference of percussion.

But there is a palpable sign of the presence of liquid, often manifest with a moderate degree of distension, more characteristic than any sign, not excepting those of fluctuation and percussion: I mean the striking of the fingers against the liver, or any other resisting body beyond the surface of liquid. It is plain that this sign will be most evident where there is considerable enlargement of the liver, spleen, or some other solid body; and as the liquid and solid become both more distinguishable on account of the contrast in the resistance which they respectively offer to the fingers, the sign serves to detect the presence of both. Thus, a slight enlargement of the liver, reaching two or three inches below the margin of the ribs, may not offer resistance enough to be distinctly palpable by itself; but if there be a layer of serum interposed, and this be abruptly displaced by the fingers, they will strike the solid body with a distinct shock, which will unequivocally prove the presence of both fluid and solid. It so happens that in a large proportion of the cases in which there is fluid effused in the peritoneal sac, there is also more or less enlargement of the liver, or some other large viscus; hence this sign becomes more generally useful. By its means I have been enabled to detect the presence of even thin deposits on the omentum and intestines, and of deeper seated mesenteric and ovarian tumours. Solid feculent matter in the intestines may give a similar resistance to the fingers under a layer of fluid; and it is important that this source of error should be avoided, by having the bowels well cleared by aperients before the examination.

In manipulating for this sign of liquid and solid resistance, the fingers should be gently pressed more or less into the walls, and then a deeper impulse is to be abruptly made with their ends, so as to strike at any body which may offer resistance, and which then meets the stroke. Over an enlarged liver or spleen, this sign is best felt in the sitting or erect posture; or if the quantity of fluid be considerable, in the prone or leaning forward position. Indurations of the omentum and intestines are better detected when the patient lies on the back. In considerable enlargements of the spleen or left kidney, I have found this sign in the left lumbar region; but in other cases, the front of the abdomen is its usual seat.

On two occasions, through a modification of this sign, I have diagnosed the presence of something adhesive on the striking surfaces. One was a case of ovarian tumour with ascites; the other, chronic peritonitis with enlarged liver. In both, the fingers readily felt the displacing fluid and the striking against the solid underneath; but on withdrawing the pressure,

* The tension of the rectus on the right side is often greater than that on the left, and I have frequently known it to be mistaken for enlargement of the liver. It does, in fact, sometimes arise from tenderness of the liver, which induces instinctively a firmer contraction of the muscles over it, to avert the pain of pressure.

the surfaces in contact could distinctly be felt to adhere for an instant before following the fingers, being retained by something adhesive. This sticking sensation was plainly felt by several students, to whom I pointed it out at the time, ascribing it to a coating of adhesive lymph. The *post-mortem* examinations did not occur till long after, but there was in both cases a deposit of false membrane on the surfaces which justified this inference. Probably this sign may prove useful in aiding to detect the presence of the low forms of peritonitis which frequently accompany abdominal tumours.

Fluctuation has long been recognized as a characteristic sign of the presence of fluid in the abdomen. It is commonly felt on applying the left hand on one side of the abdomen, and striking abruptly on the opposite side with the right hand, so as to direct the impulse towards the other hand. A wave is moved by the impulse, and rapidly passing to the opposite side, gives to the left hand the soft shock of fluid in motion. This wave-stroke is transmitted from one side to the other only when there is a continuous layer of fluid. If a fold of intestine rises to the surface in the centre of the abdomen, it intercepts the wave. Hence it often happens, where the quantity of liquid is moderate, that the fluctuation is felt at the lower part of the abdomen in the sitting or standing posture, and not when the patient lies on his back. The distinctness and character of the fluctuation vary according to circumstances that can be pretty exactly defined. The most remarkable degree is that produced when the abdomen contains much fluid, whilst the walls are thin and their tension is increased by a good deal of air in the intestines beneath the fluid. This adds to the elasticity of the walls; and wherever struck, they instantaneously transmit the shock with a kind of spring to every part of the surface; and so faithfully, that if a quick tattoo be played with the fingers on any part of the abdomen, each stroke can be felt in every other part with the greatest nicety. This highly vibratory fluctuation may therefore be considered a sign of flatus in the intestines, together with liquid in the peritoneum. Nor is this indication unimportant in its practical relations, for it leads to the use of mercurial purgatives and carminatives; which, by dispersing the wind, not only relieve the tension of the abdomen, but also bring the organs into a state more favourable for the absorption of the fluid.

When the distension of the abdomen depends on an excessive quantity of liquid alone, the fluctuation is still very distinct, but different in character from the last variety. It is less vibratory and spring-like, strikes the feeling hand with a deader, heavier shock, and requires a stronger stroke from the other hand to set it in motion. This kind of fluctuation, together with the peculiarly weighty feel of the abdomen in every part when lifted with the hand, and the equally dull sound on percussion, is a conclusive proof of the presence of a vast quantity of fluid, such as can seldom be removed without the operation of tapping. In fact, the same weight and pressure which we feel through the walls of the abdomen, is also oppressing and obstructing the organs of circulation, absorption, and secretion, to such a degree as to impede their functions, and to render them little amenable to purgatives and diuretics, which ordinarily excite their action. Hence, with such a state of abdomen, we find the urine and feces continue very scanty and vitiated, in spite of all the remedies we employ.

A moderate amount of liquid in the peritoneum requires more care to develop its fluctuation. It is most distinctly felt in the iliac regions when the patient is in the sitting or standing posture, which not only accumulates the fluid in greater quantity in these parts, but also thereby gives the requisite tension to the walls. If the liquid is in still smaller quantity, it may be insufficient to reach from one side of the abdomen to the other; and then it must be tried for in a more limited space, such as the hypogastric or in the one iliac region in the sitting posture. A delicate method of detecting small quantities of fluid by fluctuation, is by keeping the patient for some minutes lying on one side, then after he has turned nearly but not quite on his back, feeling for the fluctuation with the fingers lightly applied to the iliac region of the undermost side, whilst the other hand gently taps the flank or the hypogastric region; or the position of the feeling and striking hands may be reversed. By this expedient the fluid accumulates in contact with the walls where they are thin, and renders evident the gentlest fluctuation.

In feeling for such delicate and superficial fluctuation, it is important that the fingers should be very lightly applied; not pressed into the walls; otherwise the most sensitive parts of the fingers will be out of the reach of the wave. The soft and weighty feel of the liquid, as before described, may be taken in confirmation of the sign of fluctuation. The sensation of undulation itself, in fact, comprises more or less of the same

impression of something heavy, soft, and in motion. It is important not to mistake for fluctuation an undulatory movement excited by percussion in the soft fat of the walls. This may be distinguished by its more uniform diffusion over the surface of the abdomen; by its not occurring more in dependent parts than in others; by its less liquid and weighty impulse against the fingers; and by its occurring chiefly in fat subjects, in whom the flabby adipose texture can be pinched up between the finger and thumb in such quantity as to prove that the walls are too thick to transmit any very superficial feeling of fluctuation from liquid in the abdomen. In fact, these cases of flabby fat abdomen are those in which small quantities of liquid are less readily detected by fluctuation, than by the comparatively greater weight and duller stroke-sound of the most dependent parts.

The discovery of a small quantity of liquid is of great importance in some cases; as for example, in distinguishing peritonitis from colic or neuralgic abdominal pain, and from tympanitis, with which it is sometimes combined: and in detecting the first commencement of ascites, when remedies are more likely to be effectual than in the advanced stages. We are accustomed to watch for the signs of fluid effusion as indications of analogous conditions in the pleura; and by careful attention to the tests of palpation and percussion, these signs are not less available in the peritoneal cavity. It is true that we have not the striking contrast of the hollow-sounding lung, and the variations of voice and breath-sounds, to aid in their detection; but, on the other hand, we have the combined tests of percussion and palpation, and above all, we have in changes of posture of the patient the means of concentrating the liquid in a dependent part, and of transferring it to another, in a degree unattainable with pleural effusion.

An obscure fluctuation may sometimes be elicited in the liquid contained in portions of intestine, in the urinary bladder, and even in the gall-bladder, and in cysts connected with the ovary, the liver, the kidney, and other viscera; and if the quantity of fluid be considerable, it will manifest somewhat of its property of weight and soft resistance. But liquid thus contained may be distinguished from that free in the peritoneum, by its more obscure and less superficial fluctuation, and especially in its circumscribed position, which may not be the most dependent, and which is not materially changed with the position of the patient. It is quite possible to have combined, and to distinguish, the two kinds of fluctuation, the peritoneal, superficial, or gravitative, and the visceral, deep-seated, or circumscribed. The detection of the superficial fluid is even easier than usual, for the sac or cyst underneath raises the liquid, and makes it to spread more or less over its surface; which renders the fluctuation more obvious, and affords the additional criterion of the striking by displacement of the superficial liquid, as before described. The deep fluctuation is to be felt by first displacing the surface liquid by pressure, and with the hands thus deeply applied, succussion is attempted, and the contents of the cyst further felt. Change to the prone or leaning forward posture will commonly help in this investigation; as the cyst is often heavier, and, displacing the superficial fluid, comes in contact with the walls sufficiently to be manipulated. When the peritoneal fluid is scanty, the sac is more widely in contact with the walls, and may not be separable by any change of posture. In this case it may be of importance, in reference to an operation, to determine whether the sac adheres to the peritoneal walls; and in one such instance, a case of ovarian cyst, I was enabled to decide this point by the following expedient. The funnel end of a stethoscope being applied to the abdomen where the tumour was in contact with the walls, suction was used at the other end so as to make the walls adhere (by atmospheric pressure) to the instrument; it then became a means of separating the walls from the sac, the peritoneal fluid occupying the space; the presence of which fluid was determined by palpation around the part adhering to the stethoscope, and thus the non-existence of adhesions was proved. This patient was subsequently tapped; and when the fluid again accumulated, the surfaces could no longer be separated, adhesion having taken place around the puncture.—*Dublin Quarterly*, February, 1851.

CLIII.—CASE OF INCREASED POWER OF VISION PRECEDING AN AFFECTION OF THE BRAIN. BY FRANCIS DEVAY, PHYSICIAN OF THE HOTEL DIEU, LYONS.—An artist, 32 years of age, became my patient in 1849, at the Hotel Dieu. Although possessed of some talent, he had, in consequence of political changes and other circumstances, become gradually reduced, and was in great distress. A year before entering the hospital, his sight, which was originally good, acquired a still greater power. He could, from his window which opened upon a long street, distinguish objects and

persons which previously he had not been able to distinguish or even to see. This exaltation of sight continued until the month of August, 1848, when he was seized with violent and continued pain in the right parietal region; there was also feebleness of the left arm. These symptoms continued to increase until March, 1849, when paralysis and contraction of the right arm ensued, with blindness of the left eye. On his entering the hospital, (St. Anne's ward) in July, his condition was as follows:—Almost complete stupor; the eye paralysed, and nearly covered by the superior eyelid; paralysis and contraction of the whole of the left side of the body; involuntary discharge of urine and feces. This state continued until the beginning of September, when death took place, preceded by symptoms of slow fever.

The *post-mortem* showed partial and circumscribed softening of the middle and superior part of the right hemisphere. The convolutions were pale and puffy, the pulp of a deep grey colour. With the exception of the corpus callosum, which appeared less firm, the rest of the cerebral substance was healthy.—*Gazette Médicale de Paris*, January, 1851.

CLIV.—CASE OF NERVOUS PERIODICAL APOPLEXY. By DR. TIESSIER.—Dr. Tiessier has now under his care a lady, 60 years of age, who, since the change of life, has been subject every month, at the same period at which she had been accustomed to menstruate, to the following attack:—She becomes unconscious, and on recovering her senses one-half of her body is paralysed, accompanied with difficulty of speech. These symptoms continue for several days, and gradually disappear to return at the usual time. Some days before the attack comes on, though naturally calm and tranquil, she evinces much agitation and restlessness. She cannot remain long in one place, and persons about her are never deceived as to the result of this sign. We do not here remark on the other interesting particulars of this case, but confine ourselves to recording, with the skilful physician who has furnished us with these details, an example of *nervous periodical apoplexy*.—*Gazette Médicale de Paris*, January 11th, 1851.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

A gradual increase in the mortality is represented by the following numbers of deaths returned in the last three weeks: 956, 1041, and 1109. In the ten weeks of 1841-50, corresponding to that which ended last Saturday, the average number was 1063, which, if corrected for comparison with the mortality of the present time, by assuming the annual increase of population at 1.55 per cent., becomes 1160. This estimated amount differs in no very considerable degree from the 1109 deaths registered last week. The increase, equal to 68, in the present return over the preceding week (ending February 1) arose almost entirely amongst the young, the number of persons who died above 15 years have been about 590, and remaining in both weeks nearly the same. It is further to be observed, however, that notwithstanding an excess in the general result, the mortality from epidemics is perceptibly diminished amongst the middle-aged and the old, whilst complaints of that class, to which the young are subject, if not declining, do not appear to be gaining ground. The excess of last week over the previous is due, in great part, to the aggravated fatality of pneumonia, and likewise bronchitis, amongst young persons. The aggregate of deaths caused by diseases of the respiratory organs, comprising all ages, was last week 253, which exhibits an increase on the average. The tubercular class, including consumption, number 172, which is less than the average, the destructive malady now mentioned claiming 113 out of these, being less than its usual contingent at this time.

In the epidemic class, small-pox destroyed 20 children, and 5 persons above 15 years; and in only 3 of the 25 cases there is probable ground for inferring that vaccination had been performed with effect and in sufficient time previous to the eruption of the disease. A few examples of this rather prevalent complaint, in connexion with remarks of the Registrars, are selected from the records of the week:—

On 31st January and 5th February, in Lumley-court, sub-district of Charing Cross, the daughters of a carman, aged 1 and 3 years, died of "variola natural (7 days)." According to Mr. Leonard's statement, "these fatal cases of small-pox are the result of carelessness and apathy on the part of the parents, who live within 40 yards of a free vaccination station. The first case in this court occurred in a house opposite, but sufficient time for vaccination of these children elapsed before they were seized. Several have been vaccinated, and up to this time have escaped small-pox; but some parents, whose children have received protection, with much selfishness refuse the vaccine lymph to others."

On 6th February, at Cambridge-crescent, Agar Town (Camden Town sub-district), the son of a brewer's servant, aged 3 years, died of "confluent small-pox (10 days), not vaccinated." The houses (says Mr. Holl) are crowded, damp, and wretched; many are occupied by two

families, though they consist of only two rooms each. Vaccination was not obtained in the above case, in consequence of prejudice against it entertained by parents.

In St. Luke's, City-road, at 15 Bath-buildings, on 4th February, the son of a printer, aged 3 weeks, died of "small-pox (5 days)." Mr. Hamlin mentions that "three other children in the family are ill with the same disease. The informant believes that it was aggravated by smell arising from nuisances in this and adjoining houses, which belong to one landlord, are let for lodgings, and have not been properly cleansed for years. The drainage is very defective."

In Haggerstone West, at Mary-street, on 4th February, the son of a carpenter, aged 6 months, died of "variola (2 weeks), vaccinated 3 weeks ago." Mr. Bowring states, that "the disease has been in the house for the last six weeks, and it was with much difficulty that the medical attendant could prevail on the parents to allow the deceased to be vaccinated."

The births of 848 boys and 756 girls, in all 1604 children, were registered in the week. The average of six corresponding weeks in 1845-50, was 1464.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 7th inst.:—Messrs. Frederick Francis Ormond, Plymouth; Philip Henry Tribe, Bengal; Charles Monteiro D'Almeida Lempriere, Australia; Paul William Bullock, Bristol; Watkin Sandon Whylock, Chatham; Edward Connor Cornelius, Upper Canada; and Duncan McCallum, Montreal, Canada. At the same meeting of the Court Mr. Henry Slade passed his examination for naval surgeon; this gentleman had previously been admitted a member of the college, his diploma bearing date August 10, 1846.

APOTHECARIES' HALL.

Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practice, on Thursday, the 6th inst.:—Francis Thomas Van Hemert, Frodingham, Lincolnshire; William Jay Williams, Manchester.

OBITUARY.

On the 8th instant, at Wellington-square, Hastings, after a short illness, James Mackness, M.D., aged 46.

On the 8th instant, at his residence, Gloucester, aged 70, Ralph Fletcher, Esq., for many years surgeon, and late consulting surgeon to the Gloucester General Hospital.

NOTICES TO CORRESPONDENTS.

A STUDENT is informed in reply to his query, that Mr. Highley, of Fleet-street, is the publisher.

MEDICO-CHIRURGUS.—We think something ought to be done for Professor Grant. The right thing would be a pension from Government, but this is easier said than done; nevertheless, we entreat those who have interest in the right quarter to use it in his behalf, and, in the meantime, we ourselves shall be happy to receive subscriptions for the proposed testimonial, until a committee is formed.

In reply to the letter of Dr. Hunt, of Farningham, we beg to observe that his name was reprinted from the original text, taking for granted that it was correct.

Several gentlemen who have kindly forwarded us communications, have written on both sides of the paper. It will greatly oblige the Editors and Printers, if in future, they will be so good as to write on one side of the paper only.

All newspapers forwarded to the Editors, should be marked with the scissors, otherwise it is difficult to discover which article the sender wishes to draw our attention to.

Communications have been received from—

JAMES GLAISHER, Esq., F.R.S., Royal Observatory, Greenwich.

THOMAS CHARLES, Esq., Bangor.

GEORGE JAMES SQUIBB, Esq., Orchard-street, Portman-square.

EDWARD HALFORD, Esq., City-road.

London and Provincial Medical Protection and Benevolent Society.

DR. HOSKINS, Guernsey.

REV. ALFRED WELD, Stonyhurst.

HENRY ASHTON, Esq., Walton, Preston.

RICHARD V. GORHAM, Esq., Aldeburgh.

W. R. MILNER, Esq., Wakefield.

W. BROOKE, Esq., Norwich.

E. J. LOWE, Esq., Nottingham.

DR. D'ALQUEN.

HUTCHINSON POWELL, Esq., M.D.

To all these gentlemen, the best thanks of the Editors are due.

At JERSEY, the reading of the thermometer on the grass was 28 deg. on the 3rd; 32 deg. on the 4th and 6th; and 30.5 deg. on the 7th. The wind very variable, and blowing frequently from opposite points during the day. Violent hail-storm, but short in duration, on the 6th, at 9 A.M. Vegetation everywhere rapidly advancing. The genista pubescens, and several varieties of camellia, in full flower in the open ground at Belle Vue.

At GUERNSEY, the 2nd, before noon, dark clouds, showers, fresh breeze; afternoon, light clouds and sunshine. On the 3rd hoar frost; A.M., sunshine and calm; P.M., sunshine and clouds, wind S.W.; evening, rain. The 4th sunshine and clouds, fine, light breeze. On the 5th, A.M., overcast, hazy, fresh breeze; P.M., showers; evening, squally. On the 6th, sunshine and clouds, strong breeze. On the 7th, gloomy, calm; evening, hazy, showery. 8th, the sky clear before noon, with fresh breeze; afternoon, clear, and sunshine.

At TAUNTON, the 2nd, A.M., frost, fine; P.M., fine, cirrus extensive, night frosty; primrose abundantly flowering in hedges, thrush singing. 3rd, A.M., damp; P.M., showery, light drizzle, night frosty. 4th, A.M., frost, fine; P.M., showery, night wet. 5th, A.M., wet; P.M., wet; night showery, hail. 6th, A.M., early hail shower, afterwards fine; P.M., fine, cirrus. 7th, A.M., cloudy; P.M., damp; night damp. 8th, fine throughout; night frosty. No disease is epidemic in the town.

At UCKFIELD, February 2nd, dull morning, cold rain from N.E., clear P.M.; fine night. The 3rd, hoar frost, fine day; drizzling rain in the evening. Solar halo, 1 P.M. 4th, brilliant day, evening, and night. 5th, densely overcast, heavy rain and gale in the evening and night. 6th, very fine day, brisk westerly breeze; clear night. 7th, slight frost, overcast and damp, rainy day and night. 8th, very fine day, evening and night; a few small meteors.

At SOUTHAMPTON, the 4th was a beautiful day. 5th, rain all day; at 3 P.M., force of wind 3, by Lind's gauge. 6th, beautiful day, strong wind at noon. 7th, rain till noon, and from 5 P.M. till night. 8th, beautiful day.

At ST. JOHN'S WOOD, fog on the 3rd. The 4th was fine. Rain fell on the 5th. The 6th was fine. Rain on the 7th.

At HARTWELL, the 2nd was overcast. A frost on the 3rd and 4th. Zodiacal light was seen, with pulsations, on the 4th. There were frosts on the 6th and 7th. Mr. Horton says that "the thrush has been heard for some time singing, the blackbird began singing lately, crows have commenced building."

At CARDINGTON, the 2nd was cloudy, hazy at night. 3rd was cloudy, slight rain fell in the afternoon; shooting stars were seen at night. 4th, bright sunshine, frosty air. 5th was cloudy, windy; wind and rain at night. 6th, bright sunshine, frosty; bright and starry at night. 7th, cloudy, windy; slight rain all day. 8th, sunshine; fine, bright, and starry at night. The following are in flower—common primroses, winter aconite, violets, periwinkles, hepaticas, &c.

At NORWICH, 3rd, overcast morning and forenoon; light rain in the evening. 4th, fair and cloudless throughout the day. 5th, overcast in the morning; rain and very high wind at night. 6th, fair all day. 7th, thick mist in the morning; afternoon, rain; very heavy during night, with wind. 8th, morning fair.

DAILY DIRECTION OF THE WIND AND FALL OF RAIN:—

Names of Stations.	FEBRUARY.							RAIN.		
	2	3	4	5	6	7	8	Fall in the week	Fall from 1st Jan.	No. of days it fell from Jan. 1.
Jersey	N.E. 0.45	N. 0.06	N.W. ...	S.E. ...	N.W. 0.27	S.W. 0.05	N.W. 0.07	in. 0.90	in. 4.72	...
Guernsey	N.E. 0.14	S.E. 0.06	N.W. 0.14	S.E. ...	N.W. 0.30	S.W. ...	N.W. 0.05	0.69	5.72	29
Truro .....	...	...	...	S.W. 0.15	N.W. 0.34	W. ...	N.W. 0.14	0.63	10.78	35
Exeter	N.E. ...	S. ...	N.W. 0.06	S.W. 0.17	N.W. 0.01	W. 0.02	N.W. ...	0.26	7.03	31
Southampton ...	N. 0.03	S.E. ...	N.W. ...	S.W. 0.17	W. 0.65	S.W. ...	N.W. 0.25	1.10	6.62	...
Uckfield	N.E. 0.15	S.E. 0.03	S.W. ...	S.W. 0.49	W. ...	W. 0.25	N.W. ...	0.92	5.33	25
Lewisham	N. 0.06	W. 0.16	W. ...	W. ...	W. 0.12	W. ...	N.W. 0.18	0.52	3.40	25
Greenwich	N. 0.16	S.S.W. 0.05	W. 0.01	S. 0.07	S.W. 0.08	W. 0.02	N.W. ...	0.39	3.34	23
St. John's Wood ..	N. 0.07	S.E. 0.05	W.S.W. ...	W. 0.15	S.W. ...	S.W. 0.21	N.W. ...	0.50	4.09	24
Hartwell	N. ...	S. 0.02	S.W. 0.02	S.W. 0.18	W. ...	S. ...	N.W. 0.19	0.39	3.19	19
Cardington	N. ...	S.S.W. 0.05	S.W. 0.03	S.S.W. ...	W.S.W. 0.10	S.W. ...	N.W. 0.15	0.30	2.46	17
Norwich .....	...	...	...	W. 0.03	S. 0.02	S.W. 0.10	N.W. ...	0.45	0.61	3.02
Nottingham .....	...	...	...	S.W. 0.12	S.W. 0.08	S.W. 0.02	N.W. 0.05	0.32	2.48	27
Hawarden	N.W. ...	W. 0.20	W. 0.30	W. ...	W.S.W. 0.10	S.W. ...	N.W. 0.15	0.75	4.00	22
Liverpool	N.E. ...	S.E. 0.37	S.W. 0.20	S.E. 0.06	W. 0.09	S.W. 0.25	N.W. 0.19	1.16	4.18	23
Manchester	N.E. ...	S.W. 0.44	S.W. 0.02	S.W. 0.21	W. 0.06	S. 0.43	N.W. 0.23	1.39	...	...
Wakefield .....	...	...	...	S.W. 0.14	S.S.W. 0.01	W. 0.08	W.S.W. ...	0.07	0.01	0.31
Stonyhurst	E.S.E. ...	S.S.E. 0.50	W.S.W. ...	S.S.W. 0.51	W. 0.05	S.W. 1.04	N.W. 0.41	2.51	9.10	33
Whitehaven	N.E. ...	W.S.W. 0.65	W.S.W. 0.03	S.W. 0.46	N.W. 0.21	S.W. 0.80	N. 0.44	2.59	12.30	34
Glasgow .....	...	...	...	S. 0.08	S. 0.44	W.S.W. 0.62	W. 0.19	1.53	8.55	33
Dunino	N.W. ...	S.W. 0.02	W. ...	S.S.W. 0.01	W. ...	S.W. ...	W. ...	0.03	4.29	23

At NOTTINGHAM, 2nd, fine sunshine; overcast evening, few drops of rain. 3rd, overcast; from noon till 4 P.M., rain; from 6.15 nearly cloudless; 10.15 falling star. 4th, white frost, fine sunshine; 10.40 fine meteor. 5th, in the night, rain and wind; dull from 4 P.M., until 7.30 wind and rain, then calm, stars. 6th, fine; 1.30 P.M., hail shower; fine after; 9 P.M., falling star. 7th, wind and light rain. 8th, fine, night cloudless and very clear.

The lowest reading of a thermometer on grass, was 27.5 deg., and the highest in the sun was 64.7 deg. The amount of evaporation was 0.280 in.

Snowdrops, hepaticas and winter aconites, are in full glory.

February 2nd. The Aurora of last night was accompanied by rays. It extended 30 deg. above the horizon, and there was slight increase of wind. To-day bundles of white cloud with striated borders passed over, with wind from N.W. The barometer increased 0.076 in. during the day, but began to fall at 11 P.M. The decrease of temperature was 2.8. The electrometer, under cloudless sky, gave a sign of 8 deg., and the sign of active electricity was perceptible. On the morning of the 3rd there was rain and sleet, which continued until mid-day. The wind which was at first S. gradually veered to the S.W., W., and N.W., in which direction it remained for the day. When the rain cloud cleared off, clouds of the cirrus class were abundant. The decrease of the barometer for the day was 2.17 in., and the increase of temperature 1.2. The electrometer gave a sign of 9°, under clear sky, and the sign of electric disturbance was 3. On the morning of the 4th there was frost, and a hail shower at 10 A.M. The hills were white with snow. The wind was W. for the day, and cumulus was the prevailing cloud of the morning, but during the afternoon it was thinly overcast by clouds of the cirrus kind. The barometer rose .471, and the temperature increased also 3.3. The sign of active electricity was 7, and the electrometer gave a divergence of 9 degrees under cirrus cloud. On the 5th the sky was nearly overcast all day, and rain fell occasionally; cirrus and cirro-cumulus were common during the day. The barometer decreased .431, and the increase of the maximum thermometer was 7.9. At 10 A.M., the electrometer gave a negative sign under dark heavy cloud; but in a short time it gave a positive one under cirro-cumulus. The sign of the electrometer for the day was 8 deg., and that of active electricity 7. The Aurora, which was accompanied by pulsation, was observed from 10 P.M., to midnight; and at that time the wind, which was 2. for the day, was 4. On the 6th there was a hail shower at 11 A.M., and cumulus was the prevailing cloud of the day; but a few patches of cirro-cumulus passed with the wind from the W.N.W., at an altitude of 40 degs. above northern horizon. The barometer increased .774 in., from 3 P.M. yesterday, to 11 P.M. of to-day, when it again began to fall, and there was rain during the night. The wind was 3 from the W.N.W. all day, and the decrease of maximum temperature was 10 deg. The sign of the electrometer was 30 deg., and that of electric disturbance was 9. The gold leaf electrometer, which was not at all susceptible on the previous or following days, gave a very considerable divergence. During the morning of the 7th, there was drifting rain, and the remainder of the day was overcast with cirrus and cirro-cumulus. Late in the day, under dark cloud, the electrometer gave a negative sign. The decrease of the barometer was a little more than .100, and the increase of the maximum thermometer was 8.4. There was a diffused light in the North during the evening. 8th, nearly overcast all day, and a few drops of rain were felt. The wind was from the N.W., and cirrus and cirro-cumulus were observed above the northern horizon. The diseases of the week were:—On the evening of Saturday, the 1st, a man aged 43 years, epileptic from childhood, died suddenly. On the third there was one case of neuralgia, one of erysipelas, and one of diarrhoea. On the fourth there were two cases of diarrhoea. On the 5th diarrhoea one, acute rheumatism one, and two cases of ear-ache (children). On the 6th vomiting of blood with diarrhoea one (this patient had an attack of epistaxis on Saturday last). Neuralgia one, and a young man who is subject to epileptic fits was seized with intense head-ache, and he became epileptic two or three days afterwards. On the 7th tooth-ache one, ear-ache one, paralysis of the lower extremities one. On the 8th, tooth-ache one case. Since the evening of Saturday the 1st, to the 9th of February, I have witnessed three cases of epilepsy, two of which proved fatal, and one of paralysis of the lower extremities. Colds and coughs are prevalent. Pear-trees budding.

At MANCHESTER, 2nd, fine clear morning; gloomy 10 P.M. 3rd, snow early in morning; 8 P.M., hail shower; 10.11 fine starlight. 4th, gloomy morning; 10 P.M., fine, starlight. 5th, rain, high wind, morning; very wet afternoon; 10 P.M., starlight. 6th, 11 A.M., hail shower, and rain; 10 P.M., gloomy. 7th, gloomy, rain; heavy rain all morning; 10 P.M., overcast. 8th, strong wind; 10 P.M., fine, moonlight.

At LIVERPOOL, 2nd, A.M., Cumulus; P.M., clear in zenith till 6; heavy rain during the night. 3rd, thorough wet day; hail fell at 7 P.M. 4th, A.M., clear; P.M., overcast and squally, showers of hail. 5th, A.M., overcast; P.M., clear in the zenith, hail during the evening. 6th, A.M., Cirro-cumulus; P.M., Floccy-cumulus, rain during the night. 7th, A.M., heavy rain; P.M., overcast. 8th, A.M., heavy showers, cumulus and scud; P.M., clear.

At STONTHURST, 2nd, fine, sunny; thaw. 3rd, snow in morning, turned to rain; heavy rain in evening. 4th, morning fine, sunny; afternoon, cloudy. 5th, morning fair, damp; driving rain in afternoon. 6th, rain at night; fair, strong wind during day. 7th, pelting rain till near 3 P.M., rest of day generally fair. 8th, night stormy and wet; high wind in morning, evening calm and clear.

At WHITEHAVEN, continued heavy rain; vegetation unusually forward; grass 4 inches in length, in some fields in the country.

At DUNINO, the 2nd, was fine; the 3rd, cloudy; the 4th, clear, frost; the 5th, damp fog; the 6th, fine; the 7th, overcast; and the 8th was fine.

At JERSEY, Billous attacks very prevalent, and much influenza, especially at St. Helier's.

At GUERNSEY, Scarlatina still prevalent; fatal among the poor, especially along the course of a mill stream, in the track pursued by cholera in 1832 and 1849. Little disease of any other kind.

At EXETER, No prevailing epidemic.

At UCKFIELD, Scarlatina, hooping-cough, typhus, hysteria, and ophthalmia have been prevalent during the week.

At HARTWELL, Colds, with sore throats accompanied by head-ache.

At BEDFORD, Catarrh, Influenza, and rheumatism are the only prevailing diseases.—T. H. BARKER.

At NORWICH, Health of the city improved; the same diseases, however, still prevailing, but in a milder form, viz, influenza, &c.

In MANCHESTER there were 114 deaths and 115 births; in Chorlton-upon-Medlock, 12 deaths and 12 births; in Hulme, 33 deaths and 52 births; in Ardwick 9 deaths and 14 births; in Salford 24 deaths and 58 births; in Cleeetham 1 death and 9 births. There were 4 deaths from fever, 7 from small-pox, and 2 from scarlatina. Ardwick, 1 death from small-pox. Salford, 2 deaths from fever, and 1 from small-pox. The deaths from small-pox are somewhat more than usual.

At LIVERPOOL, there have been a few more cases of fever last week; but the general state of health remains very good.

At GLASGOW, the city considered to be very healthy. As one of the results of the system of observations organised by Mr. Glaisher, it may be stated that, at the suggestion of the writer, the magistrates of Glasgow have agreed to publish a Monthly Mortality Bill of this great city, now possessing a population of nearly 400,000.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

MESSRS. LANE AND LARA, MEDICAL AGENTS, 14, JOHN STREET, ADELPHI, have always for disposal Practices, Partnerships, and such Businesses as are usually carried on by Professional men of all kinds, in every locality.

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IMPORTANT TO THE PROFESSION.

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(FROM DR. GOLDING BIRD.)

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"I have now, for some time, employed pretty largely the triple compound of Iodine, Quinine, and Iron, prepared by Mr. J. T. Davenport in the form of syrup; I do not hesitate to express my opinion of its great value as a therapeutic agent. It has appeared to me, that the Quinine assisted the assimilation of the iron, and I have found it to be of very great value in cases in which the use of the Iodide of iron is recognised. This triple compound possesses many advantages over the simple Iodide, and not the least of them is the satisfactory manner in which it is tolerated by the stomach, especially if administered (as all preparations of Iron ought to be) immediately after a meal.

"GOLDING BIRD, A.M., M.D., F.R.S.,
Fellow of the Royal College of Physicians,
Physician and Professor of Materia Medica at Guy's."

(FROM DR. GEO. P. MAY.)

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SYRUP OF THE IODIDE OF QUININE, is an effectual form of administering Iodine: the enervating effects are entirely obviated, Dose, $\frac{1}{4}$ drachm to 1 drachm.

SACCHARATED IODIDE OF IRON. Dose, 2 to 5 grs. 2s. per oz.
CITRATE OF QUININE AND IRON, Containing full quantity of Quinine. 5s. per oz.

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BIMECONATE SOLUTION OF OPIUM. Professional testimonials acknowledge this Preparation to be the most efficient sedative extant; the unpleasant effects of ordinary opiates are entirely obviated. Dose 11 to 30 drops, 8d. oz.

COTYLEDON UMBILICUS. The Solid and Fluid Extracts, 1s. 3d. and 1s. oz.; also the Preserved Juice, 5s. 4d. lb., as recommended by Mr. Salter, of Poole, in Epilepsy.

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The Fluid Extract prepared by the spontaneous inspissation of the pure Juice. When diluted it presents every characteristic of the fresh Juice, 6s. per lb.

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This Preparation recommends itself to the Profession by its uniform and known composition, and its accordance with established physiological principles. It consists of the staminal principle of wheat—the gluten—denuded of starch, as far as possible, to leave an agreeable food, adapted to cooking.

Many leading Physicians and Accoucheurs now recommend it, and their report is uniformly most satisfactory.

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BULLOCK'S SEMOLA is a most agreeable substitute for gruels; it may be cooked in a variety of ways, for which directions are given.

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The Medical Profession is informed that the objects of this Society are—
1st. To create a higher tone in the public mind towards the Medical Profession, without compromising its honour, standing, or liberal character, and to secure the more regular payment for professional services from that large class of Society who possess the means, but not the disposition, to remunerate Medical Men.

2nd. To establish a Fund, to be devoted to the erection and support of a College for the Education of the Children, Orphans, or otherwise of Medical Men, and also for the reception of Distressed Members of the Medical Profession or their widows.

3rd. To negotiate the Transfer of Practices, Partnerships, and for the provision of Assistants.

Annual Subscription One Guinea, which constitutes a Member, and entitles to all the benefits of the Society.

Particulars to be obtained from the Secretary.

No unqualified person can be admitted a Member of this Society.

The Trustees and Committee are responsible for all moneys paid to the Society, and also for the integrity of their Agents.

NATIONAL PROVIDENT INSTITUTION,
48, Gracechurch Street, London, for MUTUAL ASSURANCE on LIVES, ANNUITIES, &c. Enrolled under the Acts of Parliament relating to Friendly Societies.

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The following statement shows the progress of the Institution from its commencement:—

Years ending	No. of Policies issued.	Annual Income.	Amount of Capital.
20th Nov., 1836	616	£ 8,021 12 2	£10,736 3 0
" 1837	435	14,600 0 0	31,592 10 5
" 1838	459	19,934 19 4	46,855 0 10
" 1839	490	25,457 4 2	64,959 10 10
" 1840	494	31,091 10 10	90,545 13 9
" 1841	357	36,367 1 4	114,993 2 4
" 1842	364	39,360 9 7	139,806 1 7
" 1843	703	44,219 17 0	167,079 11 2
" 1844	722	55,037 9 2	202,162 1 0
" 1845	911	70,819 14 5	241,460 13 3
" 1846	1005	88,940 8 2	299,675 12 4
" 1847	1234	111,113 13 0	367,172 16 0
" 1848	1243	126,232 7 6	440,028 15 3
" 1849	1736	151,976 4 7	517,243 7 1
" 1850	1549	172,500 16 9	623,869 14 7
Total number	12,498		

Copies of the Report presented to the Members at the Fifteenth Annual Meeting, held at the London Tavern, on the 16th ultimo, may be had on application at the office.

The next Quinquennial Division of Profits will be made up to the 20th November, 1852.

January 10, 1851.

JOSEPH MARSH, Secretary.

DIVISION OF PROFITS.

ALBION LIFE INSURANCE COMPANY,
LONDON.

INSTITUTED IN 1805.

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John Hampden Gledstanes, Esq., Chairman.
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At the last division of Profits (1849), every policy-holder insured upon the Participating Scale of Premium became entitled to a return of one-fifth of all the premium he had paid, either in the form of an immediate Cash payment, or by Augmentation of the Sum insured, or Reduction of the future Premium. The next Division will take place in 1852, when every Policy effected on or before 30th April next, will entitle the holder to a larger share of the divisible surplus than if effected after that date.

Amongst other advantages secured to policy-holders in this Company, are—a low rate of premium at the younger ages; the payment of the sum insured at the end of 30 days after proof of death; and the liberty of residing in many parts of North America, the Cape, New Zealand, and Australia, without any extra charge except for sea-risk.

For Forms of Proposal, Prospectuses, &c., apply to any of the Company's Agents, or to

JOHN LE CAPPELAIN,

Actuary and Secretary.

BRITISH MEDICAL FUND.—A Provident and Relief Society for Medical Men, their Widows and Orphans.

DIRECTORS.

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Benjamin Guy Babington, M.D., F.R.S.
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John Spurgeon, M.D.
George James Squibb, Esq.
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This Society is now in active operation, and prepared to grant Life Policies of Assurance for sums not exceeding Two Hundred Pounds, and also for Deferred Annuities.

The Society is also desirous to complete the list of Subscribers for the Sickness Fund, in order to bring this branch also into immediate operation.

28, Bloomsbury-square,
December, 1850.

GEORGE HAWTAYNE, Secretary.

Printed by SYDNEY HEDLEY WATERLOW, of Gloster-terrace, Hoxton, in the county of Middlesex, at the printing-office of Messrs. WATERLOW and SONS, 66, London Wall, in the city of London, and published by THOMAS MARTIN, at the Office, East Temple Chambers, Whitefriars street, in the precinct of Whitefriars, in the city of London.—Saturday, February 15th, 1851.

THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 8.

LONDON, SATURDAY, FEBRUARY 22, 1851.

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ORIGINAL COMMUNICATIONS.

MEDICAL ARCHÆOLOGY.

By GEORGE JAMES SQUIBB, Esq.

No. V.

UPON EARLY EMPIRICISM.

"Empiricism is the madness of many for the gain of a few."—Swift.

PARACELSUS.—The most extraordinary empiric that ever lived was Paracelsus, which name he assumed instead of his family one of Bombastus. He was a Swiss by birth, and although his father was a physician he gave his son no education. Paracelsus therefore, was self-taught; and it must be acknowledged that he had a very precocious genius. His industry, also, was uncommon, for he not only sought the acquaintance of the learned, but frequented the workshops of mechanics, descended into mines, and neglected no means that offered for the acquisition of knowledge. He also consulted barber surgeons, conjurors, quacks and old women. His medical practice consisted in certain new and secret medicines, prepared from metallic substances and vegetables, many of which were deadly poisons. These he administered with such success, that although ignorant of the learned languages he was appointed Professor of Medicine at Basle, through the interest of the learned Frobenius, who was his patient. One of his nostrums he called azoth, and attributed to it the power of converting the vilest metals into gold. It was also a pretended panacea or universal specific, and his disciples called it the tincture of life, (the elixir vitæ); being, they said, the divine gift to man in these last days. While Paracelsus was at the height of his fame, a circumstance occurred that proved his ruin. A wealthy canon of Basle falling sick, offered Paracelsus one hundred florins to cure him. This he effected with three pills of opium, one of his principal medicines. The Canon being so soon recovered refused to fulfil his promise. The affair was brought before the magistrate, who awarded Paracelsus no more than the ordinary fee. Indignant at this treatment, Paracelsus threw up his post and removed to Alsace, and after various migrations ended his days in an Hospital at Salzburg, in 1541, at the age of 58.

Paracelsus has had the common fate of those who profess new doctrines in science. By his admirers, of whom he had many, he has been cried up as a master of philosophical mysteries, while others have stigmatized him as an ignorant impostor. Crato, one of his opponents, says that his medicines, even when they performed an apparent cure, left the patients in such a state, that they soon after died of palsies or epilepsies. Notwithstanding all this, he had a great name, and was much followed for his medical skill, which he pretended to have derived from divine illumination. His principal remedies were opium, antimony, and mercury. Of the two latter substances he made various preparations; and it is but doing him justice to state, that he appears to have been the first that used mercury in the venereal disease.

His chemical system consisted in resolving everything into three elements—salt, sulphur, and mercury; but for this he was indebted to his predecessor, Basil Valentine.

The works of Paracelsus were, in 1658, collected and printed at Geneva, in three volumes folio. The name of this innovator was for many years a proverbial one, to designate a charlatan; while the vulgar and superstitious held the name of Paracelsus in reverence, and believed that he must have derived his knowledge from invisible and supernatural agents. So Hudibras, in his dispute with Sidrophel, says—

"Bombas has kept a devil's bird,
Shut in the pommel of his sword,
That taught him all the cunning pranks
Of past and future mountebanks."

Upon which Dr. Grey quotes Naudæus, who observes, in his 'History of Magic,' "that though the alchemists maintain that it was the secret of the philosopher's stone, yet it were more rational to believe that, if there was anything in it, it was certainly two or three doses of laudanum, which he never went without, because he did strange things with it, and used it as a medicine to cure almost all diseases." On the same authority, it is asserted that, when Paracelsus obtained the medical chair in the College of Basle, he ordered the works of Galen and Avicenna to be burnt, declaring that, "if God would not assist him, he would advise and consult with the devil." A later commentator on Butler's poem says of Paracelsus, that "he was, it is true, vain, rash, and boasting, but his knowledge of the art of medicine was far superior to that of his contemporaries; and something should be allowed for a man whose enthusiasm led him to break the trammels of the schools, and, in spite of the opposition of prejudice

or ignorance, to think and act for himself—such a man was Paracelsus. There can be no doubt that he was an enthusiast and an egotist, and often prescribed with great temerity; but if the schools of medicine owe to his boldness a perfect knowledge of those two invaluable articles of the materia medica, opium and mercury, his name deserves to be handed down to posterity with applause among those of the most illustrious physicians of any age or country."

ROBERT FLUDD.—Robert Fludd was born in Kent in 1574, and took his degree at Oxford, after which he travelled in search of knowledge. On his return in 1605, he became Fellow of the College of Physicians in London. His publications are very numerous, but all in Latin, and so obscure, that it may be questioned whether the author understood his own dogmas. It is well observed by one of his biographers, that so peculiar was his turn of mind, there was nothing which ancient or modern times could afford, under the idea of occult wisdom, which he did not eagerly gather into his Magazine of Science. All the mysterious and incomprehensible dreams of the Cabalists and the Paracelsians, he compounded into a new mass of absurdity; in hopes of improving the medical and chemical arts, he devised a new system of physics, loaded with wonderful hypotheses and mystical fiction. He supposed two universal principles, the northern or condensing power, and the southern or rarefying power. Over these he placed innumerable intelligences and geni, and called together whole troops of spirits from the four winds, to whom he committed the charge of diseases. He applied his thermometer to discover the harmony between the *macrocosm* and the *microcosm*, or the world of nature and of man; he introduced many marvellous fictions into natural philosophy and medicine; he attempted also to explain the Mosaic Cosmogony, in a work entitled 'Philosophia Mosaica,' wherein he speaks of three primary principles,—darkness as the first matter, water as the second, and the Divine light as the central essence, creating, influencing, and vivifying all things. Of secondary principles, two active—cold and heat; and two passive, moisture and dryness; and he describes the whole mystery of production and conception, of regeneration and resurrection, with such vague conceptions, and in such obscure language, as leaves the subject involved in considerable darkness. Some of his ideas, such as they were, appear to have been borrowed from the Cabalists and Alexandrian Platonists. In fine, Fludd ascribes the magnetic virtue that pervades the universe to the irradiating influence of celestial spirits.

JOHN DEE.—It may not be amiss to state something here of the famous Dr. John Dee, who, although a divine, had all the qualifications of a first-rate quack. He was a native of London, and graduated at Cambridge, but being charged with magical practices, he went in 1548 to Louvain, and afterwards lectured on geometry in the College of Rheims; but, in 1551, he returned to England, and obtained some church preferment from Edward the Sixth. In the reign of Mary, he was troubled on account of his religion, and even accused of practising against the queen's life, by enchantments; he however escaped without punishment, and in the reign of Elizabeth rose to great favour with her Majesty, who condescended to visit him at his Parsonage, at Mortlake, in Surrey, and in 1578, sent him to Germany to consult with the most eminent physicians on her case, she being then indisposed. In 1581, Dee took a young man, named Edward Kelly, at a salary of £50 a-year, to be his associate in carrying on an intercourse with spirits. This practice was continued for about two years, when a Polish nobleman, Albert Laski, was received into their connexion, which proved of great service to Dee, as he was a person of considerable property. Within a short time the palatine returned home, and prevailed upon Dee and Kelly to accompany him. As soon as they were gone, the populace broke into the parsonage, which was left untenanted, and destroyed or carried off all the goods, out of enmity to Dee, who was generally believed to have dealings with the devil. Laski, after keeping his two English friends and Dee's wife some time at his castle, became tired of their company, and sent them to the Court of the Emperor, Rodolph the Second, who quickly packed them off to the King of Poland, at Cracow; that monarch, however, soon detected their delusions, and treated Dee as an impostor. After this, the two adventurers went again to Prague, but were banished from thence at the instigation of the Pope's nuncio.

Some idea of their distress at this time may be formed from a curious prayer in Dee's MSS. in the Museum; it is dated at Prague, 1585.

"We desire God of his greates and infinite mercies to grant us the helpe of his heavenly mynisters, that we may by them be directed how or by whom to be ayded and released in this neces-

sitie for meat and drinke for us and for our family, wherewith we stand at this instant much oppressed; and the rather, because it might be hurtful to us, and the credit of the actions wherein we are linked and moured unto his heavenly Majesty (by the mynistry and comfort of his holy aungels) to lay such things as are the ornament of our house, and the covering of our bodies in pawn, either with such as are rebels agaynst his Divine Majesty, the Jews, or the people of this citye, which are malicious and full of wicked slander. I Jane Dee, humbly request this thing of God, acknowledging myselfe his servant and hand-mayden, to whom I commit my body and sowle. Edward Kelly wrote this for Jane Dee."

At length, in the year 1589, Queen Elizabeth, who had a great regard for Dee, sent him orders to return home, and although he travelled with as much pomp as if he was her Majesty's ambassador, on landing he was not worth a penny. He now took up his residence at Mortlake, and on memorializing the Queen for relief, a commission was appointed to inquire into his losses and claims. Among the former he stated the destruction of his chemical apparatus, which he estimated at two hundred pounds. And in enumerating his services, he reckons some consultations with her Majesty's physicians at home, and a journey of fifteen hundred miles which he undertook in the winter season, to hold a conference with the most learned philosopher on the continent upon the means of restoring and preserving her health. After subsisting some years in a great measure on private bounty, he was presented to the Wardenship of the College Church of Manchester, where he quarrelled with the fellows to such a degree, that in 1604, he returned to Mortlake, where he resumed his old superstitious practices; having parted with Kelly abroad, he employed one Hickman in the same capacity. For a considerable time King James patronized Dee, but afterwards discarded him as a vain pretender to useless and occult science. Thus, in the latter end of his life he fell into a miserable state of poverty, and in 1608 died at Mortlake, at the age of eighty.

He left several children, one of whom, Arthur Dee, was initiated into all the hidden mysteries professed by his father. He applied himself to physic, but not having graduated regularly in that faculty, he was refused a licence by the London College, on which he went to Russia, and on the recommendation of King James was appointed physician to the Czar. After residing in that country fourteen years, he returned to England and settled at Norwich, where he soon lost the money he had gained abroad, in the vain search for the grand elixir, or philosopher's stone. He at length was so reduced that he suspended a label at his door, exposing for sale several nostrums by which he professed to cure diseases. He died as poor as his father, in 1651.

Dee was of the Chemical School of Physic, and a close follower of Paracelsus, as anyone may see that takes the trouble of looking into his work, the only one he ever published, entitled 'Fasciculus Chemicus, Abstrutia Sciencæ Hermetica, ingressum, progressum cosmidem, explicans.' Printed at Paris in 12mo., 1631.

HUGH ATWELL.—Carew, in his survey of Cornwall, mentions among the remarkable men of that county in his time, Hugh Atwell, as a divine and a physician. He was minister of the parish of St. Ewe, and had the reputation of saint-like piety.

"Besides other parts of learning," saith he, "with which Mr. Atwell had been seasoned, he was not unseen in the theoricks of physic, and could, out of them, readily discourse touching the nature and accidents of all diseases. His practice was somewhat strange, and varying from all others; for, although now and then he used blood-letting, and did ordinarily administer manus christi, and such like cordials of his own compounding, yet mostly, for all diseases, he prescribed milk, and very often milk and apples, a course deeply subject to the exception of the best learned practitioners; yet thereby, whether by the virtue of the medicine, or the fortune of the physician, or the credulity of the patient, he recovered sundry out of desperate and forlorn extremities. Thus, his reputation was of many years standing, and maintained itself unimpaired; but his fame soared to a higher pitch by the help of another wing, and that was his liberality; on the poor he bestowed his pains and charges gratis; of the rich he took moderately, and he would leave the one-half behind, in gifts among the household, if called abroad to visit any. The rest, together with the profits of his benefice (rather charitably accepted than strictly exacted from his parishioners), he poured out with both hands in pious uses, and would hardly suffer a penny to sleep, but never to dwell with him." This reverend practitioner, who was also deemed a conjuror, attained the age of one hundred years, and his female servant one hundred and twenty. Mr. Atwell was buried at St. Ewe, May 4th, 1617.

(To be continued.)

LEAVES FROM THE DIARY OF A PARISH DOCTOR.

BY THEOPHILUS PROBE, ESQ.

No. IX.

(Continued from page 61.)

THE public in general have but a very faint idea of the duties and labours which belong to the Medical Officers of Unions, nor can they conceive the annoyances, the needless demands upon their time, and moreover the indignities to which they are subject. Under the present law how many matters are thrust upon the over-worked doctor, which were never contemplated or required under the old! Take, for instance, the weekly returns of the sick and wounded, the necessity of inserting under the proper column the names of the diseases under which the patients labour, no matter how private or delicate these diseases may be. "Amenorrhœa," "menorrhagia," with a multitude of other feminine disorders, in ordinary to be deposited in the breast of the medical adviser, with as stern a secrecy as is observed by the priest on matters connected with the confessional; these are now to appear and be open to comment by any guardian who may be wise enough to understand them. We have no objection to a proper register of such ailments in order to statistical correctness, but then that register should be only read by a competent and proper person, and never subjected to the gross animadversions of members of a Board of Guardians. One revolts at such profanity, for we regard these delicate points as sacred. Then, again, there are—or were in our time—occasional voluminous papers to be filled up and furnished to the Commissioners. Single documents likewise, testifying to the state and condition of individual paupers, with the amount in weight and measure of the aliments they required, and lastly certificates of death, wherein are to be inserted the primary and secondary causes of mortality—difficult questions, we admit, considering the multitude of anomalous diseases which shorten life, for which no name can be found amongst the classical arrangements of nosological writers. Why, it would puzzle a Cullen, a Good, or a Sauvages to define under one cognomen, the disease which terminates existence in one-half the cases which come under the cognizance of a Parish Doctor. We wish we were thorough Grecians—we would have under a fine name, "The Potato Disease," under which paupers have lived and withered year after year. The "Hard-dumpling Disease," flour and water boiled to the consistence of a cricket-ball, which lies upon the stomach, heavy and indigestible as lead. Then we would have the "Tea Disease," infused sloe-leaves and catechu. In short, we could find a multitude of maladies arising from pure inanition, and from that substitute for genuine aliment, which poverty on the one hand, and base wickedness on the other, have provided for the indigent in this fair land of ours, the beautiful island of Britain. Say, ye learned, can ye find names for such a legion? We confess it is past our art, or our learning. There are, however, helps in these difficulties—"Decay of Nature" is a happy hit, and "Marasmus" is a charming substitute for a more defined and legitimate specification of mortal decay. Now what additional fee does the poor doctor get for all these clerly functions? Additional fee!—Nonsense. Let him remember, under the category of his parochial contracts, he ought to consider five shillings a year for the parish of Wimble—only one hundred inhabitants and two miles from his residence—or Shuffleton, or Nibleborough, with their hundreds and their thousands—he ought to consider that the sum paid by the liberal "Board" is amply sufficient for all the contingencies thereunto belonging.

There has been much talk amongst the supporters of the "new regime," of the vast superiority of the present arrangements in regard to the sick poor. How much better they are attended—with what promptness, &c. Alas! what blind creatures we are—what mole-like vision we possess,—for we have never seen it! We confess that "Boards of Guardians" profess to be mighty rigid.—Yes, exacting to the very letter: like Shylock, they will have their bond; and the pound of flesh is often yielded to them, going near as it does to the very hearts of their oppressed officers. But are they sure, because a man runs a hundred times to look at a fire, and is very attentive in staring at it, and describing how rafter after rafter is consumed, are they sure he has raised one bucket of water to put it out?

We know how ready these "Boards" are to take up questions of alleged negligence, and that, too, with a high hand; to listen to statements made by false reporters, and even interested persons—nay, that they have presumed to enter the arcana of medical and surgical science, and to question whether a surgeon ought to use

Liston's splints in fractures or any other. Yes, we know they have done this, learned and distinguished as they are. And if, in the plenitude of their wisdom, they have seen right to censure their medical officer, and dismiss him their service, their brand has been so plainly written, that the unhappy sufferer could never again be admitted within the precincts of parochial office! If one had the blood of a Plantagenet in one's veins, it must boil at the indignities to which educated men have been subjected by this race of tallow-chandlers and soap-boilers, master-tinkers and master-tailors. How preposterous is the investment of such power in such men. To be humble is a Christian precept, but humility under such circumstances is grievous to the flesh. We admire Christian meekness; it is a charming repressor of faulty exuberance, but it would be well for the profession if a small modicum of Plantagenet blood could be infused into the veins of Parish Doctors. We do not want to see the representative of our race in the position "Punch" placed him, accepting office from the "white-waistcoated gentlemen" under every revolting indignity which could be poured upon his head. Verily, we sicken at the thought.

The man who is hardy enough to accept the office of Parish Doctor (we stick to the old name, as title without estate is very worthless), must first assure himself that he is really religious; like Lawyer Downing, in Tom Jones, he must possess the faculty of dividing himself—here, there, and every where at the same time; for should anything untoward occur, and he not at his post, woe be to him—that's all. He stands a good chance of getting the parochial brand. Is not his five shillings a year for the parish of Wimble, amply sufficient to insure a substitute in case of necessary absence? Why, he is expected to name this substitute before entering upon his lucrative employment! Then he must look for frequent cries of "wolf," and although it be but a harmless lap-dog that is barking amongst his flock, in good truth he must personally drive away the marauder. Let him look for continual dissatisfaction amongst all parties concerned. Amongst the poor, for they have an intuitive knowledge of what is right and what is wrong, in physic. He must be hardy, indeed, to treat a wound *secundum artem*, if Nurse Gobble says, "Friar's Balsam is best." He must expect the Rector's lady to be very angry, if he does not come immediately she sends, to Betty Stubb's great toe—no matter if his present engagement involves a case of life and death. And he must suffer occasionally, what we have done, abuse in the open street, from a self-sufficient functionary, because, forsooth, we could not obey his mandate the instant it was delivered; nay, moreover, be subject as we were, to a complaint to the "Board," although the case was one of a very trivial character, and was treated by the "Board" with the contempt it deserved, very much to the annoyance of the impertinent complainer. He must forget the supposed truism of Johnson, "The present moment is our own." No such thing, his present moment is the property of the parish of Wimble, for which he is in possession of five shillings a year, that is, if the parish of Wimble requires it. All things must succumb to parochial mandates, and the patient who pays a hundred a year, must be in the back ground, while parish contracts stand prominent in his life's landscape. Do not let it be inferred, we would have the poorest of God's creatures neglected in the hour of sickness, or distress. Do not let it be inferred, we object for a moment, to a severe system of discipline—so to speak—to insure prompt and efficient attendance on pauper patients; but let the poor man who undertakes these duties, receive a fair remuneration for his labours. Do not expect impossibilities, and where the pay is so small as not to cover his drug bill, how on earth is he to keep an assistant to fill his place, when the pressure of other practice calls him from his parish engagements. Private patients will generally accept an apology for unavoidable absence—the "Board of Guardians" will not. With respect to orders for medical attendance on the sick poor, there always has been much difficulty. Under the old system, these orders were too indiscriminately given; there seemed to be no real line of demarcation, and all who applied scarcely failed to receive, hence a great and grievous abuse. Under the present law, the extreme has been the other way. The relieving officer in his hebdomadal visits to parishes, is often pressed for time, he cannot inquire carefully into cases applying for medical orders, and seldom can visit the parties, hence has he unintentionally inflicted labour on the medical officer without need; and under particular systems of payment (the per case system for instance), he has been guilty of withholding orders, which ought in justice to be granted, because the granting them involved an additional expense, and subjected him to close inquiry from the "Board." In our own practice, the per case plan has not been adopted, and as no check has been given to the relieving officers, to act as protection to the medical

man, we have been occasionally sadly annoyed by very needless and vexatious applications, involving us in long journeys, without the slightest occasion. From our diary we select a case or two. One day having returned home late, we found lying upon our surgery counter, the following order:—

"SIR,—You are requested to see Elizabeth Snooks, who is very ill.

"Yours, &c.,

"THOS. TROUT, Relieving Officer."

We immediately set about an inquiry as to the party who had left this note, and the message which accompanied it. No one could give us the slightest information. The person, whoever he was, had been seen by no one, nor did any-one know that such a document had been left. The date, however, showed it was a recent order, and as we knew Betty Snooks to be an old woman, subject to severe attacks and of very uncertain life, we were constrained to immediately obey. The horror of guardian censure stared us in the face, and although we had not tasted a morsel since breakfast, we put off our dinner for two hours and galloped over to Betty Snooks.

The good old lady was luxuriating over her infusion of sloe-leaves by the side of a cozy fire, and looked the picture of domestic comfort and sound health. The only difference we observed in her outward habiliments was the addition of a green shade over her left eye. "Well, Betty," we exclaimed, "why what's the matter! woman, we expected to find you pillowed up in bed." "La, sir!" said she, peeping out of the corner of her right eye, "is that you? I did not expect to see you to night." "Did not expect to see us, why have not you sent us a paper, saying you were very ill." "La bless you; no sir! I sent for a bottle of eye-water, cause as how my left eye is very weak. I got Jack Cowleach, the buttermilkman, to call for it." "Well, but you sent a paper from the relieving officer, saying you were very ill." "Bless us and save us, why you've not come here on purpose I hope. I ax'd Mr. Trout for a paper to be sure, cause as how I thought you might not like to send me any without it." Thus, for the want of a defined written statement, and because Jack Cowleach came at an unseasonable time of the day, and found no one at hand to deliver his order to, he must leave this unwarrantable document in the surgery, and subject us to a journey, which if we had been compelled to hire a horse to accomplish (a fact which has occurred) would have involved an expense of five shillings at least, the whole amount for one year's attendance on the parish of Wimble.

Another case.—Late at night, when the heavens were as black and murky as though they had been covered with a funeral pall, we received an order to attend a woman, said to be in a dangerous state from "St. Anthony's Fire." Her husband was the bearer of the order and was to wait until we returned. There was no shirking this, so off we set. The road was one of the worst in our district, and the hut where these people lived was down a lane celebrated for its filthiness. We hung our horse to the paling, got over the stile, and as we have wished through life to avoid crooked paths, preferring a straight-forward way, we made directly for the door. Alas! that our moral metaphors should occasionally be incorrect. The crooked path should have been our way in this instance, for in the line we had taken was a huge "gully-hole" containing the "omnium gatherums" of the whole nest of cottages. In one moment we were up to our knees in a vile combination of every conceivable filth, capable of being generated by such parties. It was quite out of the question to stir an inch either backwards or forwards, so without hesitation we set up an enormous bawling; this had the effect of bringing out the whole inhabitants, in every imaginable costume, for one-half of them were in bed, and surely it would have made a capital picture, to see the poor Parish Doctor up to his knees in this hole, lugged out by dames in their night-caps and flannel petticoats, while some were enjoying the fun, and laughing in the back ground, until their sides almost cracked. Now for the case: the woman had had the tooth-ache for a week, it had brought on a large gum-boil, had swollen her face of course, and some Nurse Gobble or other had pronounced it "St. Anthony's Fire." Alas! for the addition to our tailor's bill, we spoilt a capital pair of trowsers on this sorrowful occasion. There are, however, cases in parish practice, where from the want of a little knowledge, and a little attention on the part of persons whose duty it is to attend, sad and grievous events have occurred. We have not been without such cases, and the issue of one in particular distressed us for months. We would prefer riding miles after such cases as Betty Snooks than have another such occurrence as the following. One morning just as we were starting on our country rounds, a little girl, about ten years of age, presented herself at our surgery. She stated that her mother, a poor woman belonging to our parishes had been taken ill with pains in her bowels. She had taken

physic, but it had not moved her, and she wished us to send some apéritic that would. She had brought no order, but as the woman was well known to us, we did not hesitate to send what was required.

At night a paper was left at our house by a baker who had been with his bread to the village, and whose way home was by our dwelling—it ran thus, and was written by the overseer of the parish.

"Sir,—I am informed that Sarah Bilson is very ill. I think you had better see her as soon as you can.

"Your obedient servant,

"JOSEPH JOHNSON."

Not a single message accompanied this paper, and the very fact, that it was entrusted to a casual passer-by, and not conveyed as it ought to have been by any part of the poor woman's family, and moreover, that it was ten o'clock at night—we hesitated, and in the end did not go. We do not know whether there are many believers in occult sympathy; but certain it is, an uncomfortable feeling stole over us that night, and once or twice we were on the eve of ordering our horse. Would to God we had done so, and satisfied our uneasy presentiments! However, we desired to be called up as soon as it was light, and made the best of our way to the poor patient. Alas! she had died one hour after the paper was delivered to us. We could have been of no value, as it turned out. We should have arrived in time to see her die, and our conscience would have been at rest if we had obeyed the summons; not having done so opened a door for censure. This was doubtless a case of *enteritis*, and ought to have been most promptly and vigorously attended to. Where was the husband, that he did not make application long before? Too lazy and indolent to set about it. Where were the neighbours? Too indifferent. Where were the authorities? Content to trust the case of a dying woman to a scrap of paper, and the bearer of it—a casual, uninterested person, who, in the hurry of his own business might or might not have left it. Would any private patient treat his medical attendant thus? or would any farmer, or farmer's wife, be content in so urgent a matter to risk their chance of getting medical advice upon so uncertain a messenger? This affair subjected us, as of course it would, to a severe examination by the "Board." We do not complain of any want of courtesy on their part—they patiently and properly inquired into all the particulars, and saw at once that we had never been put in possession of the facts of the case, by parties who were competent to do so. The husband, as he deserved, had a severe reprimand; we were given to understand that we ought, on the immediate receipt of the overseer's order, to have visited the woman, even although as it turned out, we could have done her no good; and a new edict was passed and entered on the minutes, viz., "That every medical officer on the receipt of an order, should visit the patient immediately, and not send medicine until the case was seen." Thus Betty Snooks' case came under the category of this edict. Happy—happy—Parish Doctor!

Now, would a case like this have occurred under the old system? We say, no. Had the overseer been applied to in the morning, he would have refused the order, because the case would not have appeared to his mind pressing enough for him to interfere. Under the old system an order would have been granted at once, and the husband or some efficient person been compelled to be the bearer of it. Boards of guardians restrict overseers of parishes and compel them only to grant medical relief in pressing and emergent cases. "God save the mark!" How know they when cases are pressing and emergent? We have known cases of illness put off by overseers, day after day, to wait the arrival of relieving officers, under an apprehension that the "Board" might not sanction the order. Nay, we have known these functionaries threatened with being compelled to pay out of their own pockets the doctor's bill, if they sent medical orders afterwards unsanctioned by the "Board." Yes, and we have known poor sick people compelled to suffer, until their husbands or their friends have travelled miles to obtain a relieving officer's order, to his own residence, a good day's journey. Call this an improvement upon the old system? Call this an advance in the right direction? It might be if there were a California in every village, or if the poor labourer could get work, and wages, to meet the wants of his family, and the means to pay for medical advice. But as far as we can see there is little chance of that.

Disease is not a matter to be trifled with. It is not like an account to be paid, when the creditor may be told "to call again to-morrow." It is one of those affairs which wants instantly opposing—if it enters one door, the physician should enter the other; or, what is better still, if it be seen lurking about, let the doctor be ready to bolt the door, inasmuch as it is better to prevent than cure. What a capital chance is afforded the enemy

while the poor victims are sent from pillar to post to obtain the mandate which summons the opposing party. Would a skilful general allow a belligerent army to enter the citadel before he called his soldiery to oppose them? Nonsense; he would attack the outskirts, and bring all his power to play before they reached the walls. So should it be in the insidious advances of the great enemy, which we of the medical profession have to combat. The utmost facility should be afforded, that the poor man may not die, if medical skill can save him. We say again, these things did not exist under the old law, nor must they under the new. It is a blot on the nation's escutcheon, and it must be rubbed off, or worse will come of it.

(To be continued.)

CORRESPONDENCE.

URIC ACID IN THE BLOOD IN HEALTH AND DISEASE.

To the Editor of 'The Institute.'

SIR,—Under the above head, an extract from a paper by Dr. Garrod appeared in the last number of your Journal, to which, with your permission, I should like to add a few observations, and remain,

Yours, faithfully,

D'ALQUEN.

February 10th.

Without questioning in the least the accuracy of the facts stated in the paper alluded to, still, I believe, one of the conclusions drawn from them by the distinguished and talented author, requires a restriction which I am anxious to point out. In his second proposition, Dr. Garrod states, the uric acid is diminished in the urine immediately before the gouty paroxysm, &c., &c. Now, this is so far from being the case, that in most instances an opposite state of the urine has been observed during the twenty-four hours preceding an attack of gout; and some authors even state, that a paroxysm of gout may be prognosticated a few days before its setting in, from the excess of uric acid observable in the urine of the patient. I have observed this myself, over and over again. The question therefore arises, how far are these contradictory statements reconcilable? Perhaps in saying, "The uric acid is diminished in the urine," Dr. Garrod does not allude to the absolute quantity of the specimen under examination, but to the quantity passed by a person in health during the twenty-four hours. If so, it is apparent that the specimen under examination may have an excess of uric acid with regard to its absolute quantity, and be at the same time deficient as to the average calculation for the twenty-four hours in health. In this case, therefore, we might say with Dr. Garrod, Here is a deficiency; and, with other observers, Here is an excess of uric acid. I believe, also, that those authors who speak of an excess of uric acid as a premonitory symptom of a goutic attack, refer only to the quantity of urine under examination, because they assert, also, that the urine is generally diminished in quantity, and loaded with lithic deposits, which increase as the paroxysm abates. However, it would be desirable to have this point settled by further observations. Dr. Todd has also pointed out this peculiarity of the urine in goutic patients many years ago, in his remarks on gout, rheumatic fever, and chronic rheumatism of the joints; but, as occurring chiefly in the urine of reduced subjects. The urine was without the usual lithic deposits, and its specific gravity below the standard; a proof that neither an excess of urea nor of uric acid in solution could be present. In conclusion, I would remind the reader, that in many cases an excessive perspiration of the affected parts has been observed, as a kind of topical crisis, leaving a whitish powder upon the skin: this is the urate of soda. Dr. Garrod states, likewise, that in albuminuria, the quantity of uric acid present in the blood is often almost as great as in gout. This is, I have no doubt, in many other diseases the case; but it would be an interesting question to decide, why depositions of lithic concretions in the organic tissues are only observed in gout, and not in other affections equally remarkable for a lithic diathesis.

To the Editor of 'The Institute.'

SIR,—I was requested to visit a lady of title some time ago, who I was told had fallen down dead.

She expected to be confined every day, and was walking with her husband in the garden, and stepping over some garden pots which had been placed across the path, when immense hæmorrhage

took place, and she was carried into the house for dead. I found her on the sofa in her clothes, pale, exsanguined, and pulse scarcely perceptible; os uteri closed *but flabby*; I gave her a large teaspoonful of laudanum in about four ounces of sherry, desired her lady's-maid to undress her carefully, and had her carried to bed. In a short time blood began to ooze out. I boiled two drachms of secale in four ounces of water fourteen minutes, and gave it as a draught; in twenty-three minutes she had one pain, and the child was born in about twelve or fifteen minutes more. The child was dead; the mother did well.

Yours obediently,
FRANCIS DAVIES.

Pershore, February 7, 1851.

EXTREME HÆMORRHAGE ACCOMPANYING THE PASSAGE OF A UTERINE POLYPUS.

To the Editor of 'The Institute.'

SIR,—The following paper was read by me before the Medico-Chirurgical Society of Edinburgh, in March last. If you consider it contains any points of interest to the obstetric physician, or the general practitioner, you may publish it in your valuable Journal.

I am, Sir, yours faithfully,
PATRICK BROWN, M.D.

Eastnor Villa, Royal Leamington Spa.

In relating the following narrative, my principal object is, that it should act as an encouragement to my junior brethren, and also to point out the propriety of "*never despairing*" in circumstances the most unfavourable and discouraging. In the outset of professional life, the value of this axiom will be found sufficiently obvious.

The instance here adduced was vividly brought to my recollection on perusing in the January number (1850) of the 'Edinburgh Monthly Journal of Medical Science,' Professor Simpson's paper "*On the Detection and Treatment of Intra-uterine Polypi.*" My case was in many respects similar to the one so graphically depicted in the first plate attached to that article—with this pleasing difference, that it did not terminate fatally.*

Late one evening in the winter of 1834, I received a pressing message to visit a poor woman named Fergusson, at Woodhouses, a hamlet about three miles distant from my residence in Whitchurch, Salop.

The request had been made by the rector of the parish, the Rev. Charles Maitland Long, a gentleman whose ample means and entire exertions were devoted to the wants of the poor.

From some cause I could not immediately attend to the summons, but in the course of an hour after I set out, and when about half way on my journey, was met by Mr. Long returning home, who apologized for the unnecessary trouble he had given me, saying it was useless proceeding, as the woman was dead—at least he thought it was impossible for her to be then alive, as she was dying when he left the cottage. He could give me but little information as to the nature of her case.

Being anxious to ascertain the cause of her death, and also to satisfy my own mind that she was dead, for I was aware how easily to the uninitiated a state of syncope might simulate dissolution; I therefore proposed proceeding, Mr. Long kindly accompanying me. A sharp gallop soon brought us to the bedside of the poor creature, whom I found to be still alive, but almost pulseless and anæmic, her extremities deathly cold, her face bedewed with a clammy sweat, the bed soaking in blood; she was still sensible, and could articulate in the faintest whispers.

I learned that she had been in bad health for some time; that for several days previously she had been losing blood, but on that

day had been flooding profusely; that she had suffered violent pains like labour pains, and supposed she must be miscarrying. Her husband was absent; she had only one little girl of tender years at home, to wait upon her; in fact, she was dying from want and neglect; application had been made that day to Mr. Long for aid, but she felt it was now too late.

On my entry I lost no time in making an examination per vaginam, and found the os and cervix uteri dilated with a round substance of firm consistence, about the size of a pullet's egg. It was evidently a tumour, which the natural powers were endeavouring to expel, but was retained by some portion too high to be detected by the fingers, and too securely for the feeble uterine efforts to separate.

From the flaccidity of the parts I could without much difficulty lay hold of the lower portion, and by twisting it round and pulling I soon succeeded in bringing the mass away.

It proved to be a pear-shaped fibrous polypus, and had been suspended by a narrow pedicle to the upper portion of the uterus, part of which attachment had doubtless given way, accounting for the great discharge of blood, and the comparative ease with which I accomplished its removal.

I fastened a shawl tightly round the abdomen and plugged the vagina with some wet rags. A messenger was despatched to the rectory for wine and brandy, a little tea being the only nourishment procurable in the mean time. Warm bricks were applied to her hands and feet; old clothes were placed so as to keep her from the bed, cold and soaked with blood.

The timely arrival of stimulants soon produced very gratifying results; every attention was bestowed on the subsequent management of the case, and although the recovery was tedious she was soon able to attend to her little domestic affairs, her strength gradually becoming restored, but her countenance for several years presented a blanched and ghastly appearance. She is still alive, and I believe in good health.

Had I from any cause put off, or much longer delayed my visit to this poor woman, the certain result would have been (had it been procurable) a beautiful pathological specimen, and another convincing proof that those men who imagine no danger can occur from hæmorrhage while such tumours are yet within or attached to the uterus, are not always correct in their opinions. And, in conclusion, I have to observe, that to my distinguished friend, Professor Simpson, the obstetric portion of the profession are deeply indebted for the blaze of light he has lately thrown upon this distressing and important class of diseases, and for the simple and admirable means he has placed in our hands for their detection and removal.

It is, however, a subject of regret in too many instances in this country, for patients or their friends, from erroneous feelings of delicacy, to neglect or avoid the only means by which a correct diagnosis can be obtained, or a rational system of treatment pursued; in diseases of the internal female organs, their true nature can only be ascertained by examination, and in numerous cases our chief reliance, with any hope of success, must be on topical applications, or the judicious use of appropriate instruments.

THE PHILOSOPHICAL GAZETTE.

ON A PECULIAR METAMORPHOSIS OF THE BILE OF THE OX.

By C. ENDERLIN, M.D.

HAVING in 1844 studied the influence of various organic acids and their salts, and acidulo-saccharine fruits, upon the properties and composition of the urine, in which I obtained the same results as those obtained by Wöhler and others, I was anxious to determine whether purified bile (then regarded as bilate of soda), when taken internally, was capable of altering the urine in the same manner as is the case with the alkaline salts of vegetable acids.

For this experiment, the bile removed from the gall-bladder of an ox, immediately after the animal was killed, was evaporated in a water-bath, and the residue treated with absolute alcohol to separate the mucus, the sulphate, &c. The alcoholic solution was decolorized with animal charcoal and preserved.

On the day of the experiment I evaporated the alcoholic solution, which had remained perfectly clear, on the water-bath, to the consistence of an extract, and dissolved it in pure water. The solution was slightly yellow, and had a barely-alkaline reaction. I could not take the whole of it: about the fourth part was left, and set aside in a beaker-glass covered with paper.

My urine remained acid, and neither by taste nor reagents could I detect any bile. The quantity of bile taken was evidently too small to convert the acid reaction into an alkaline one.

* The case alluded to is detailed at pages 4 and 5, vol. x., of the Journal. The patient *objected to local treatment*, although the nature of the disease was clearly pointed out to her by Professor Simpson and Dr. Wood as one of intra-uterine polypus. She died from the continuance of hæmorrhage; and, on opening the body, the lower part of the cavity of the uterus was found distended by a polypus attached to the back wall of the uterus by a narrow half-broken stalk. It had descended lower than when first detected, and the system was evidently endeavouring to throw off the morbid growth. Professor Simpson justly remarks, that had the os and cervix uteri been dilated during life by the means he recommends (his new and peculiarly formed sponge tents—which are also described in the same paper, both as to their preparation and mode of use),—the polypus would easily have been reached, brought away, and the patient's life saved.

Some days afterwards the solution became opalescent, then turbid, finally milky, and a white flaky deposit appeared; but the liquid had still not become clear. It had, however, now acquired a *very strongly acid reaction*. The glass remained untouched for some days.

When I again examined it, I found the flaky precipitate changed into warty masses of a satiny lustre, covered with a number of fine silky prisms grouped in stellæ and aigrettes. The liquid was now perfectly clear, but still *just as acid*. Some days afterwards I found very long capillary prisms suspended in the liquid.

The whole was then thrown on a filter, the crystalline mass washed with water, which reduced its volume somewhat, and dried with the filter. To obtain more crystals, I evaporated the filtrate on the water-bath to one-third of its volume, during which yellowish-brown resinous drops separated, which were subsequently found covered on all sides with prisms, partly in stellæ and aigrettes, partly forming a network. The resinous drops *were hard*. As I regarded the resinous body as choleoidic acid, I was in hopes of separating the crystals from it by water; but the resinous drops soon became soft, syrupy, and the water added became opalescent, subsequently milky; by the repeated addition of water, the whole became resolved into a milky liquid. In a short time a white flaky precipitate again subsided from the latter, and became converted into a voluminous network of fine prisms. The milky liquid ran through the filter, and again deposited prisms. Subsequently resinous drops appeared upon the sides of the vessel, and the liquid became clear *bilic acid*. The clear liquid was rendered milky by muriatic acid, slightly by acetic acid, and minute crystalline grains and *white oily drops* were deposited upon the sides of the test-tube, *bilic acid*. Basic acetate of lead produced a precipitate, for the greater part soluble in acetic acid. The brown resinous drops obtained on evaporation dissolved readily and completely after the separation of the adhering acid in pure water. The liquid was precipitated by mineral acids.

They therefore consisted of (unaltered?) *bilic acid*. The properties of the crystalline body, however, agreed in all respects with those given by L. Gmelin in regard to *cholic acid*, which he was the first to discover.

Strecker has shown that this is a normal and constant constituent of the bile, and has fully described its properties.

The substance I obtained fused upon platinum foil, at the same time frothing up considerably. A voluminous charcoal remained, which on incineration left a *considerable* spongy ash. The ash reddened turmeric very strongly, and effervesced with acids. The substance might, therefore, be regarded as acid choleate of soda. Dilute sulphuric acid threw down from its dilute ammoniacal solution a resinous precipitate, which, during the night, became converted into acicular groups, resembling wavelite. An alcoholic solution of it, when treated with a drop of acetic acid, and left to spontaneous evaporation, deposited the substance in the form of a syrupy mass, which after a further lapse of time also became converted into the above crystals. In another experiment, the crystals were feathery. When some of the grains of the crystals were carefully heated with a few drops of water and a trace of sulphuric acid upon platinum foil, or in a porcelain cup, they constantly assumed first a *deep sky-blue colour*, which was subsequently changed into a *blood-red*, occasionally somewhat *violet tint*. On the further application of heat, at first the most varied shades of yellow, brown, green, &c., such as are found in the bile of animals, were produced. I first observed this beautiful reaction in 1842; and am also satisfied that bilic acid affords the material for the formation of the *red* colouring matter of the blood (as also of the *blue* detected in the blood of the ox by Sanson), under the influence of sulphuric acid either already formed or in a nascent state. Now if, as will be seen from the following remarks to be very probable, the bile (and perhaps albuminous matters also) contains one or several bodies conjugate with sulphuric acid, the metamorphosis of a biliary matter into colouring matter of blood, just alluded to, would lose all its obscurity, and would render more intelligible the knowledge of the influence of the liver, or rather its secretion, upon the formation of the blood.

Further description of the Acid Liquid poured off from the Substances separated.—The intensity of the acid reaction led me to suspect the presence of a mineral acid; and as I have repeatedly found in the cinder and ash of glandular organs, especially the spleen, the liver and the pancreas of different animals, acid phosphates and metaphosphates, and as Braconnot, and subsequently Fremy, state that they have found in the liver a fat containing phosphorus (phosphoric acid), I at first suspected *free phosphoric acid*. This supposition was not however confirmed, but I found

a large quantity of free sulphuric acid present. The following are the experiments:—

1. On evaporating a small quantity of the liquid upon platinum, vapours were evolved, which strongly reddened litmus and gave a distinct odour of sulphurous acid. After incineration, a neutral ash remained, in the aqueous solution of which a barytic salt detected a considerable quantity of sulphuric acid.

2. On neutralizing the liquid with barytic water, a copious precipitate of BaO SO_3 was immediately produced. The filtrate, when evaporated and incinerated, left a residue of carbonate of baryta.

3. On neutralizing a larger quantity with carbonate of soda, evaporation to dryness, exhaustion of the residue with absolute alcohol, subsequent solution of the residue in water and evaporation, I obtained crystals exhibiting the form and characters of sulphate of soda. I sought for taurine in the liquid, but could find none. These experiments appear to me to leave no doubt of the presence of free sulphuric acid. But whence its origin? At the time the observation was made, all the conditions requisite for solving this question were absent. It could not possibly have arisen from the sulphates mixed with the unpurified bile, and which may be separated without the decomposition of the organic matter, as traces only of these are taken up by absolute alcohol; moreover, the quantity of sulphuric acid in the form of sulphates is small, and the separation of the acid from them in a free state would be without analogy. The free sulphuric acid, or its elements, must have existed in organic combination with the elements of some constituent of the bile! M. Enderlin is inclined to believe that the explanation of this remarkable occurrence is to be found in the circumstance, that the bile contains one or more conjugate compounds of SO_3 or SO_2 in an indifferent or neutral form (in combination with soda), which under certain circumstances might possibly become converted into SO_3 and other bodies, which future investigations must determine; perhaps sulphate of glycerine?, which M. Pelouze supposes to occur in the yolk of the egg.

ON THE PRESENCE OF BILE IN THE BLOOD.

By DR. C. ENDERLIN:

THE colouring matter of the bile has long since been shown positively to occur in the blood, both when in a healthy and diseased state, by the characteristic reaction of nitric acid. M. Enderlin states that he has satisfactorily detected bilic acid in both human blood and that of the ox. His method of proceeding was as follows:—

A pound of blood, taken from a woman in the eighth month of pregnancy, was evaporated to perfect dryness in the water-bath; the finely-pulverized residue was exhausted with ether to remove the fatty matters, and then, at the ordinary temperature, with strong alcohol; the alcoholic solution evaporated, and the residue treated with absolute alcohol. The reaction of the solution was somewhat strongly alkaline, its taste bitter, and it possessed the odour of bile. A few drops evaporated upon platinum-foil left an ash which strongly effervesced with an acid. It was evaporated to dryness, exhausted with water, and the following experiments made with the aqueous extract:—

1. A small quantity was treated with sulphuric acid. A milky troubling was produced, and on gentle digestion yellowish-brown resinous drops separated. 2. Another portion was concentrated in a watch-glass upon the water-bath, the residue placed upon platinum-foil, a trace of sulphuric acid added, and a gentle heat applied. The azure-blue colour, subsequently passing into a blood-red, was produced, which is considered a test for the detection of the presence of biliary matters. On the further application of heat, the mass became brownish, exhibited the appearance of old bile, and possessed a most distinct odour of bile. 3. The remainder of the aqueous solution was precipitated with basic acetate of lead, the resinous precipitate boiled with alcohol, and the solution evaporated to dryness. The lead-compound was decomposed with carbonate of soda, the filtrate evaporated, and the dry residue exhausted with absolute alcohol; the yellowish-brown extract again evaporated, and the residue treated with water. The aqueous solution exhibited the reactions of bilate of soda with mineral acids and lead-salts; it possessed an alkaline reaction, and when heated with a trace of sulphuric acid, exhibited the above-mentioned beautiful colours. The greater part of the aqueous solution was boiled with strong muriatic acid. It gave off a distinct odour of bile, and after some time dirty brown drops separated, which on cooling became solid, and dissolved in alcohol. The alcoholic solution exerted an acid reaction (the drops were washed with hot water), tasted bitter, decomposed

carbonate of soda with effervescence, and was rendered milky by water. These are the characters of choloidic acid.

M. Enderlin regards these experiments as showing beyond doubt that this blood contained bile. The presence of bile in the blood of an ox was detected by the same means in an even more satisfactory manner. M. Enderlin states that he has detected Gmelin's cholic acid, taurine and choloidic acid in human intestinal evacuations in bilious diarrhoea. On two occasions the cholic acid was obtained in stellate prisms by Strecker's method. In most instances the biliary matters were recognized by their reaction on ebullition with sulphuric acid and with muriatic acid (formation of cholic acid). He was unable to detect unaltered bile.

M. Enderlin considers the bile to serve another purpose in addition to that of respiration, viz., he regards it as the source of hæmatine, &c.—*Liebig's Annalen*.

MEDICAL INTELLIGENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 28th, 1851.

S. SOLLY, Esq., F.R.S., Vice-President, in the Chair.

(Continued from page 129, vol. ii.)

DISCUSSION ON DR. WIST'S CASE OF CÆSARIAN SECTION.

Dr. Lee rose and said—Before offering any remarks on the paper now read, perhaps the Society will permit me to take a short historical review of the Cæsarian operation, and the induction of premature labour. Without this I consider it to be impossible to pronounce a sound practical judgment on the treatment of the case now brought under our consideration. If the Society will grant me this permission, I shall endeavour to make this historical review as concise as possible. It appears from the communication now read, that the Cæsarian operation has been performed about 400 times in Europe; 48 times in the British Islands, and the remainder on the Continent. About 400 cases of this terrible operation have been recorded, but it is well known that many fatal cases have occurred, which have remained unrecorded, or consigned with all possible care to oblivion. If the number stated were 500, I believe it would be nearer the truth than 400. I know of two fatal operations which have occurred in this country—one of them recently—of which no account has been, or probably ever will be, published. The statistics of the Cæsarian operation are even more worthless than those of ovariotomy, the value of which the Society can now justly estimate. Dr. Denman says that, "Bauhin, in the appendix to Rousset, dated 1588, gives the following case:—Eliza Alespachen had the operation performed upon her by her husband, who was a gelder of cattle, at Siengenhausen, in Germany, in the beginning of the 16th century. She had several children born afterwards in the natural way." If there be any truth in this narrative, it appears that we owe the Cæsarian operation to a cattle-gelder, but whether it be true or fabulous, it is quite certain that the operation was not required; that it was performed wantonly and cruelly, and that if his wife had died, he would probably have been hung for murder, or at least would have merited this capital punishment. Guillemeau, the first systematic writer on midwifery, performed the Cæsarian operation twice in the presence of Ambrose Paré, and some of the most distinguished surgeons of Paris. Both the women died. Guillemeau states, that in 1609, he saw the operation performed on three other women in the most dexterous manner, and they all died. Not one of the five survived the operation. In consequence of these disastrous results, the operation was abandoned by Ambrose Paré, Guillemeau, and all the regular or sound part of the practitioners in Paris. "Après qu'un Monsieur Paré non l'eut fait expériménte," says Guillemeau, "et voyant que le succès en étoit malheureux, il s'est desisté et retiré de cette opération ensemble tout nostre College des Chirurgiens jurez à Paris, et la plus saine partie des docteurs Regens en la faculté de médecine à Paris." The third edition of Mauriceau's great work on Midwifery appeared in 1681, and in this we have, strenuously inculcated, the same doctrines respecting the Cæsarian operation which Guillemeau, Ambrose Paré, and all the regular physicians and surgeons of Paris had taught at the commencement of the century. Mauriceau affirmed that there were very few, if any, cases of difficult labour, in which an experienced accoucheur would fail to extract the child, dead or alive, whole or in pieces, without the Cæsarian operation. In this sentiment I most heartily concur, having never met with a case of distortion, however great, where I had not succeeded in completing the delivery with the perforator and crotchet. Mauriceau thought that

the Cæsarian operation cannot be performed on the living body, without a too great excess of inhumanity, cruelty, and barbarity. His words are, "que par un trop grand excès d'inhumanité de cruauté et de barbarie." He denounced it as a most horrible operation. Some women with cicatrices on their sides, after abscesses, endeavoured to impose upon Mauriceau, by representing that they had undergone the operation, when no such operation had been made. Mauriceau's treatise was translated by Chamberlin in 1672, and it soon became the text-book of English accoucheurs, and continued to be used as such for upwards of half a century. There can be little doubt that this is the reason why the Cæsarian operation was never performed in this country, by any regular practitioner, before 1756, when the induction of premature labour was first proposed. Since that period, and even before, a striking difference has existed on the continent of Europe and Great Britain respecting all the most important operations in midwifery; and it is necessary to explain how this has arisen. It has not been sufficiently noticed, by recent writers in this country, or rather, it has been allowed to pass entirely without remark, that the accoucheurs of France and of England proceed upon principles diametrically opposed to each other, and wholly irreconcilable. In France, the propriety of performing the Cæsarian operation on the living mother, soon after or before the death of Mauriceau, ceased to be a purely obstetrical, surgical, or scientific question, and became a strictly theological one, and was discussed and decided by ecclesiastics of the church of Rome. The fetus in utero, they maintained, had two kinds of life—one a corporeal, the other a spiritual life, the latter being communicated in baptism; and this supposed spiritual life they regarded as more precious than the corporeal life of the mother. "By the authoritative decision of the doctors of the Sorbonne," says Dr. Merriman, "it was ruled that the Cæsarian operation ought to be performed whenever it is known that the child is living, and it is impossible by other means to extract it alive, for they assert that it is a deadly sin (*péché mortel*) to perforate the head of a living child within the uterus." This unsound doctrine has prevailed over the greater part of the continent of Europe to the present time, and it has, doubtless, been the cause why the long forceps, the operation of turning in cases of distortion, long abandoned in this country by every rational practitioner, but now ignorantly attempted to be revived in Edinburgh, the Sigaultian operation, and the Cæsarian operation, have all been so often had recourse to in foreign countries. Without a knowledge of these facts, it is impossible to account for the irreconcilable differences which exist between Continental and English midwifery; they rest upon different grounds altogether; and those who inculcate French principles of midwifery in this country, which is now done by some teachers and writers to a great extent, seem to be entirely ignorant of the principles which they take up. About 1756, a consultation was held of the most eminent men at that time in London, to consider of the moral rectitude of, and advantages which might be expected from, the practice of inducing premature labour. Who were present at this consultation Dr. Denman does not state, nor with whom the idea originated, but the first case in which it was deemed necessary and proper fell under the care of Dr. Macaulay, and terminated successfully. Dr. Macaulay was then the colleague of Dr. W. Hunter, at the Brownlow-street, or British Lying-in Hospital, and I have often thought that William Hunter was the very man from whose profound scientific knowledge, originality, and humanity, we might expect such a proposal to come. Of this, however, there is no distinct proof, and who actually made the discovery—certainly one of the most important in midwifery—is unknown. This has been the fate of the authors of the most important discoveries in science. It is altogether unaccountable that thirty-nine years should have passed away after the safety, efficacy, and morality of inducing premature labour should have been demonstrated, and that the practice should have remained almost unnoticed. From 1756 to 1795, when the first edition of Dr. Denman's "Midwifery" appeared, the Cæsarian operation must have been performed with the most fatal results, fully as often as the safe and simple operation of inducing premature labour. Dr. Denman, in 1795, was only acquainted with eight cases in which premature labour had been induced either by himself or by his advice and persuasion; and he states that he had not known one untoward or hazardous accident that could be imputed to the practice. "He therefore felt authorized to say, that as far as his reason or experience enabled him to judge, the operation of bringing on premature labour is perfectly safe to the person on whom it may be performed. Before Dr. Denman, the circumstances which might render the operation needful and proper, had certainly not been stated with any degree of precision, and the morality of the

practice was still doubted by many." During the last fifty-five years the operation has been successfully performed in a great number of cases, and the lives of many children preserved by it. There are now whole families in London who owe their lives to it. There is scarcely an eminent practitioner throughout the British empire who has not been called upon to perform it. Dr. Merriman has done it upwards of thirty times. In a note which I received this morning from my colleague, Dr. H. Davies, at Brighton, he states that he has performed the operation fifty times; that twenty-nine children were born alive, and that all the mothers recovered. I have myself performed the operation as many as fifty times with the most complete success. On one patient, with greatly distorted pelvis, I have performed it about twelve times, and the woman is still alive. The operation, I repeat, is most simple, safe, and efficacious, and in cases of slighter distortion, if performed at the seventh month, or seventh month and a half, children are born alive by the natural efforts who would otherwise be destroyed by craniotomy. But it is not alone in slighter degrees of distortion that the induction of premature labour is important, it is equally so in the highest degrees of distortion, where children could not pass through the pelvis without having the head broken up. If, in all cases of high distortion, premature labour were induced about the middle period of pregnancy, or as late as the sixth month, the Cæsarian operation would never be necessary in any case, and the operation of craniotomy, if required, would be attended with neither difficulty nor danger. I believe I was the first who departed from the rule of practice laid down by the systematic writers on midwifery in this country, that premature labour was not to be induced in a first pregnancy till it had been proved that a living child at the full period could not pass through the pelvis till the volume of the head was reduced. In a number of cases in the first pregnancy, where a high degree of distortion existed, I have brought on labour before the seventh month, and thereby avoided all the dangers both of craniotomy and the Cæsarian section. I take no credit for this, as the idea did not originate with me, but with Dr. Cooper, as early as 1769, who had then proposed the following question:—"In such cases, where it is certainly known that a mature child cannot possibly be delivered in the ordinary way alive, would it not be consistent with reason and conscience for the preservation of the mother, as soon as it conveniently can be done by artificial means, to attempt to produce an abortion?" I am not aware that this practice of inducing abortion, or premature labour, in cases of the highest distortion, about the middle period of pregnancy, to avert the danger of craniotomy and the Cæsarian operation, has been recommended by any other writer in this country or on the Continent. The induction of premature labour, which not many years ago was denounced in France as a useless and injurious operation, as fatal to the mother, and the source of the most frightful abuse, I regard as the most important improvement ever introduced into the practice of midwifery, for it is not only efficacious in all forms and degrees of distortion, but in cases where ovarian, uterine, and bony tumours obstruct delivery; in cicatrices of the vagina, malignant diseases of the os and cervix uteri; in organic diseases of the heart and lungs; in dropsy of the amnion and general dropsy; renal and vesical diseases; mania during pregnancy, and especially in cases where obstinate vomiting occurs in the early months of pregnancy. It is astonishing how suddenly in some cases of this description the vomiting is relieved when the membranes are punctured, and the liquor amni escapes. The vomiting ceases as if by magic. Let those attempt to explain this phenomenon, who, by their illegal deeds and misrepresentations, attempt to persuade the profession that the uterus is destitute of ganglia and nerves. I hold in my hand a copy of Dr. Merriman's list of cases, in which the Cæsarian operation has been performed in the British islands, which were as follows till 1820:—

1. Mary Dunally, a midwife, performed the operation with a razor, on Alice Neal, near Charlemont, in Ireland. Child dead; mother recovered. 1738.

2. Mr. Robert Smith operated upon — Paterson, in the Canongate, Edinburgh. Child and mother both lost their lives. 1737 to 1757.

3. Dr. Young operated upon a woman about a mile from Edinburgh. "She was distressed with a constant vomiting, and I found the pelvis very narrow. In performing the operation, I had no occasion to take up any vessel. Having got into the womb, I could not possibly get the child away till I caused one to press up the head from the vagina, a part of it was so closely wedged in the pelvis. However, I brought away the child alive; but it fell into convulsive fits, and died in a few days." The mother died.

4. Dr. Young again operated on "a little deformed woman in the Royal Infirmary. The woman died in a few days; but the

child was alive, and was shown at the class, a healthy, promising girl."

5. Mr. A. Wood is stated, in Dr. Hamilton's "Outlines of Midwifery," to have performed this operation; but no other account is given, except that the child and mother were both *lost*.

6. Mr. Chalmer performed the operation on Elizabeth Clark, in 1774. Child alive; mother *died*.

7. Dr. Hamilton, jun., performed the operation in 1795. Child putrid; mother *died*.

8. Mr. W. White, of Glasgow, 1775. Both mother and child *perished*.

9. Mr. Kay, of Forfar. Child born alive; mother lived eleven days.

10. Dr. White, of Manchester. Child and mother both *died*.

11. Mr. Thompson performed the operation on Martha Rhodes, at the London Hospital, in 1769, in the presence of many physicians and surgeons. The child was extracted alive, fell into convulsions on the next day, and the day after it died. Mother *died*.

12. Mr. John Hunter, in 1774, operated on Mrs. Foster. Child alive; mother *died*.

13. Mr. Atkinson, in 1777, operated upon Elizabeth Hutchinson, at Leicester. Child alive; mother *died*.

14. Mr. Clarke opened the abdomen of a woman, from whom he extracted a dead child. The mother *died*. The child was at the time extra-uterine.

15. Dr. Hull operated in 1794. Child alive; mother *died*.

16. Dr. Hull performed the same operation in 1798. Both mother and child *perished*.

17. Mr. Barlow operated upon Jane Foster in 1793. Child died; mother recovered.

18. Mr. Wood performed the operation in 1799. Child alive; mother *died*.

19. Mr. John Bell performed the operation in 1800, near Edinburgh. Child lived; mother *died*.

20. Mr. Dunlop, of Rochdale. Mother *died*; child lived fourteen days.

21. Mr. Wood's case. Mother and child *perished*.

22. Dr. Kellie's case. Child born alive; died the next day; mother *died*.

23. Mr. Kinder Wood's case, related in the *Medico-Chirurgical Transactions*. Child and mother *died*.

All the mothers in this catalogue died, except Mary Dunally, who was operated upon with a razor so dexterously, by the ignorant Irish midwife, and Mr. Barlow's patient; and some still believe that this latter was a case of extra-uterine conception, and that the Cæsarian operation was not performed. There were two histories of the renowned Irish case; but neither Mr. Duncan Stewart nor Dr. King, who gave them, were present at the operation, and there are certain circumstances which throw the greatest doubt upon the truth of the whole narrative. The necessity for the operation could not, however, it is proved, have existed; for the patient had previously borne several children without any assistance, and after the operation she was able to walk about and render assistance to her family, which she could not have done had there existed mollities of the bones of the pelvis. But several besides the midwife assured Dr. King, "that a leg of the child presented itself to view in the vagina before the operation." If this case ever really occurred, which I greatly doubt, the operation was performed without any necessity; why was the leg of the child not seized and pulled down? If this is one of Dr. West's five successful cases of Cæsarian operation in these islands, it ought to be removed from the list, with Mr. Barlow's case; Mr. Knowles's case, and Mr. Cluley's related by Dr. Radford, being the only two real cases of recovery out of the fifty performed in Great Britain and Ireland; and whether these persons are now alive, and in what condition they are, no one can tell. In the third case in the above list, Dr. Young's, there is a circumstance related, which demonstrates that the operation was had recourse to in the most reckless and wanton manner, and without the slightest necessity. "Having got into the womb," he says, "I could not possibly get the child away till I caused one to press up the head from the vagina, a part of it was so closely wedged in the pelvis." Actually, the head of the child had got impacted in the brim of the pelvis, before the operation. The nineteenth case in the list, is that of Mr. John Bell in 1800, and the history of which has been recorded by Sir Charles Bell, in the fourth volume of the *Transactions* of this Society. Why the induction of premature labour was not had recourse to in this case it is difficult to imagine; the distortion was known to exist years before; the woman had been repeatedly delivered with the crotchet; and yet on this occasion she was allowed to go to the full period, and died almost immediately after having undergone this bloody operation. There

are many other cases to which these observations might be applied with equal force, in which the operation was unnecessary and unjustifiable. From the paper now read to the Society, it appears that Mr. Wren saw Mrs. Williams in the fifth month of her first pregnancy, labouring under the characteristic symptoms of mollities of the bones of the pelvis, viz., pain in the region of the pelvis, associated with great and rapidly increasing difficulty in walking. "This difficulty," it is stated, "at last amounted to almost complete inability to walk, and for some weeks before her confinement she did not move farther than from her bed-room on the second floor, to her sitting-room on the first floor, where she passed the whole day lying or sitting on the sofa, and was carried up and down stairs by her husband." "There was nothing in her appearance when she came under Mr. Wren's care," adds Dr. West, "or subsequently, to suggest the idea of her being deformed, the only peculiarity being that she always stooped very much forward." On what cause Mr. Wren imagined these symptoms to depend does not appear, nor is it stated whether a suspicion crossed his mind that a destructive disease was going on in the pelvic bones, producing a high degree of distortion. The poor woman looked forward with much apprehension to her labour, as well she might, and extracted from Mr. Wren "a promise that she should be allowed to inhale chloroform when labour came on." I presume, from the total silence on the subject in the paper, that Dr. West knew nothing whatever of the case until the 7th of May, 1850, when labour had actually commenced, and it was determined to perform the horrible operation now described. Had the nature of the disease been ascertained in the fifth month of pregnancy, and the proper treatment adopted, no man of the slightest experience can entertain a doubt that the necessity for this operation—which necessity I do not even admit, existed at the time it was performed—could have arisen, and this miserable woman might now have been alive, and the Society spared the recital of this melancholy catastrophe. The case ought to stand as a striking warning to others to avoid similar mistakes. But in January, 1847, the same fatal operation was performed by Mr. Skoy, at St. Bartholomew's Hospital, where great distortion of the bones of the pelvis was ascertained to exist in the sixth month of the first pregnancy; and yet the induction of premature labour was not employed. "The patient, Sarah B—, first consulted Mr. Jolin, surgeon, of Coppice-row, Clerkenwell, on the 3rd of October. She was much deformed, being four feet one inch in height only, and in her thirty-eighth year. Mr. Jolin promptly detected pregnancy, and became alive to the whole extent of her calamitous situation. It was plain that no child could be propelled through the pelvis, the antero-posterior diameter being only one inch and one-third, and evident that no resource remained but the Cæsarian section. Mr. Jolin lost no time in holding a consultation with Mr. Skoy, and the patient was admitted into St. Bartholomew's Hospital, under the care of the latter gentleman. Then Dr. Rigby, Dr. Protheroe Smith, and Dr. Ferguson, saw the patient, and confirmed the views of Mr. Jolin in every particular." On the 7th of October, this woman was positively ascertained to be pregnant—the catamenia had then ceased six months—she was then, in fact six months pregnant. On the 23rd of October she was examined by Mr. Skoy and Mr. Jolin, and told that an operation was necessary, in fact, the Cæsarian section. On the 6th of November she was admitted into the hospital, and continued there during the remainder of the month of November, the whole of the month of December, and till the 26th of January, when the operation was performed, in the presence, I have been informed, of several hundred spectators from all parts of the metropolis, summoned to witness this horrible spectacle. The poor woman died in thirty-six hours, and I have been informed that the child, which was extracted alive, has since died in the Foundling. In the whole history of the case, given in *The Lancet*, February, 1847, there is no allusion made to the propriety of inducing premature labour; and it may be inferred, from the total silence on the subject, that the question was never discussed by those under whose care she was placed. Why it was never mooted does not appear, though a more favourable case never presented itself for bringing on premature labour in the sixth month, and thus avoiding many of the dangers of craniotomy at the full period, and death from the Cæsarian section. It is true, the distance between the base of the sacrum and symphysis pubis did not exceed one inch and a third; but the whole brim of the pelvis was not so greatly distorted, and there was room in the sides of the pelvic brim, if not for the head to pass after craniotomy at the full period, to allow of the head of a fœtus of six months passing after being perforated, and then extracted with care and safety. This rage for cruel and bloody operations has spread far and wide,

and attempts are being made on all sides in this country, at the present moment, to pervert and corrupt the sound and fundamental doctrines of English midwifery. As a public teacher, and holding a public position, my conscience will not permit me to remain a silent witness of such abominations. This must be my apology for so often appearing before this Society, and occupying so much of their time. I shall conclude, Sir, with the recital of another case, where a similar tragedy was happily prevented. At Cupar, in Fife, in April, 1847, a woman escaped from the horrors of the Cæsarian operation in the most providential and almost miraculous manner. Dr. Simpson declares this case to be unique in the annals of midwifery, and few will differ on this point. The patient, aged thirty-four, was a poor woman, with great distortion of the pelvis from mollities ossium. She ceased to menstruate in June, 1846. When she was first ascertained to be pregnant is not stated; dates are not given; but she was seen by Dr. Simpson, with three other practitioners, early in March, 1847. "The sacrum was straight above, so that its promontory did not probably encroach on the brim." It was then decided "that the pregnancy was already so far advanced as to preclude, under such a degree of deformity, the idea of the induction of premature labour, and that the Cæsarian operation should be performed." On the 28th of April labour commenced, and a message was sent to Dr. Simpson, at Edinburgh, thirty miles from Cupar, to go and perform the exploit. He was accompanied by certain professional friends, who were, no doubt, armed to the teeth with knives, needles, sponges, bandages, ether, &c. Thus prepared, they proceeded forthwith to Cupar. The fellows will, of course, suppose that the operation was performed with the usual results, and that the death of the mother took place. Oh no; no operation was required, and the poor creature is still alive. "On arriving there," says Dr. Simpson, "*we were surprised to hear that the patient was delivered, and our surprise was only increased by learning that no kind of instrumental aid had been required.*" Dr. Lee here sat down amidst the enthusiastic cheers of the Society, and loud roars of laughter from all sides.

On the motion of Dr. Murphy the debate was adjourned until the next meeting of the Society, when a case of Cæsarian section, by Dr. Oldham, will be read.

Dr. West rose and said, that he was fully aware of the great hazard of the operation which had been performed in his case, and had endeavoured, in the paper, to do full justice to its seriousness and importance. With respect to the induction of premature labour, in this instance, it must be remembered that he (Dr. West) had not seen the patient until she was actually in labour, and he was not acquainted with her previously. His object in bringing the case before the profession was, to elicit the opinions of the fellows of the Society, whether any means could be devised to obviate the high mortality consequent upon the operation. His own opinion was, that we could not do away with the causes of this great fatality. With respect to Dr. Lee's observations on premature labour, he believed they were the opinions usually taught and entertained by lecturers and writers on midwifery, in England; though he regretted to think that many practitioners in London appeared to underrate the value and importance of that operation. In the case before the Society such a proceeding could not have been adopted, owing to the great extent of the deformity; and should a similar case occur to him, he should feel justified in resorting to the Cæsarian section.

MEDICAL SOCIETY OF LONDON.

February 1st, 1851.

DR. BENNETT, President, in the Chair.

LARGE CALCULUS IN THE URETHRA.

Mr. Henry Smith showed a calculus weighing upwards of half an ounce, which had been removed from the urethra of a man aged 36, by his friend Mr. Dyer, of Ringwood, in the year 1839. The patient had suffered from the symptoms of stone in the urethra for ten years, but had never mentioned them, until he came to Mr. Dyer. Latterly he had found that the foreign body had increased in size, and caused intense pain, by which he was driven to seek advice. The calculus was lodged just behind the glans, where a false opening existed, through which all the urine passed. It was merely necessary to enlarge this opening, when the enormous stone then exhibited was removed.

Mr. Smith, on a recent visit to Mr. Dyer, had, through that gentleman's kindness, been able to see the patient; and he found that there was still a large quadrangular opening in the situation of the lodgment of the calculus, and that all the urine escaped

from that orifice, whilst the urethra anterior to it was entirely, or almost entirely, closed. He considered the case interesting, from the very large size of the stone. He had not seen reported an instance of the same kind, (at least, of so large a one.) It was interesting, also, to know whether the calculus was near this size when it escaped from the bladder, or whether it had not escaped as a very small one, and then increased to its present magnitude: the latter, probably, was the case. The composition of the calculus was phosphatic.

NECROSIS OF THE TIBIA.

Mr. Dampier read the details of a case of necrosis of the tibia. M. A. M., a little girl of scrofulous diathesis, æt. 3 years, fell through an iron grating in February, 1850, severely bruising the tibia of the right leg, for which she was treated by a medical man. At the end of three weeks she had nearly recovered, when she fell through a hole in the floor, and again injured the same bone. After this she was under treatment by several medical men, and at different dispensaries, and at a hospital, up to the commencement of December last, when she came under his (Mr. D.'s) care. The limb was generally swollen, and the tibia, on examination, was found much larger than its fellow, from the extensive deposit of a new shell of bone. There were two cloacæ at the junction of the middle with the upper third of the tibia, and a probe passed into either readily detected an extensive portion of dead bone, which was becoming loose. He ordered a tonic treatment, with cod-liver oil, and generous, but not stimulating diet, under which, in six weeks, she was greatly improved in her general health. There was an abundant discharge of pus, and the necrosed bone feeling more moveable, he determined to remove it, which was done on the 21st of last month, with the assistance of Mr. Coulson. He made an incision through the soft parts, of a semicircular form, including the cloacæ, and reflected the integuments in a flap. This mode of proceeding, in his opinion, has a great advantage over the straight incision, which is generally used, by at once affording ample room for removing the sequestrum, without further wounding the integuments, and does away with the necessity of assistants putting their fingers into the wound to retract the soft parts. He succeeded in removing the sequestrum entire: it comprised nearly the whole length of the shaft of the tibia. This case is interesting, inasmuch as such extensive necrosis in so very young a subject is seldom met with, and when it does take place, the process of destruction goes on with great rapidity. The new bone was fully developed, and the little patient is now nearly well.

THE USE OF THE SPECULUM.

Mr. Greenhalgh read a paper on the use of the speculum. He stated that he had examined many women with that instrument, in about a fifth of whom he discovered red and apparently granulating surfaces, varying in size from a small pea to a half-crown piece; in a few, bleeding when touched with the forceps. He then mentioned two cases, in each of which the cervix uteri was enlarged, puffy, and somewhat tender to the touch, in part covered with a large, red, and apparently granulating surface; the os uteri admitted the top of the finger; to both the potassa fusa was applied, and was followed by peritonitis; they, however, recovered under the ordinary plan of treatment. Mr. Greenhalgh then appended a case in which the potassa fusa had been applied on four different occasions; considerable destruction of the cervix uteri, with immobility of the uterus, and almost entire occlusion of the os uteri were afterwards found to exist. He mentioned that this was one among many other cases which had come to his knowledge, in which potassa fusa had been prejudicial. After reading some quotations from Dr. R. Lee's writings, to prove that the speculum was of no use in malignant and some non-malignant diseases, Mr. Greenhalgh stated that the hysterical diathesis was markedly apparent in most of the cases which came under his care with uterine symptoms; he then proceeded to detail the fallacious symptoms most commonly accompanying this peculiar uterine condition; general disorder of the health, lumbo-sacral and ovarian pains radiating around the lower part of the abdomen, with frequently more or less disturbance of the menstrual secretion; not unfrequently a spot exquisitely tender to the touch was found to exist behind or about the trochanter major; in some cases, the pains extended down the thighs; leucorrhœa, although a very common, was by no means a constant symptom; sexual congress was sometimes attended with inconvenience, occasionally with pain, and in some few cases, blood was lost either at the time or after this act; troublesome pruritus was in a few cases complained of. He then observed, that the various inclinations and mobility of the uterus were strikingly apparent in many cases he had examined. He

took a hasty glance at the varieties presented in volume and texture by the body, cervix, and os uteri as modified by individual peculiarity, the number of children borne, the more or less proximity to labour; by miscarriage, menstruation, &c.; he added, that he had never yet succeeded in seeing into the uterine cervical cavity during life. The causes of these conditions of the uterus and cervix he considered to be, local injury to the part, modified and influenced by, in many cases, the general state of health. Mr. Greenhalgh expressed an opinion, that weighing and measuring uteri in the dead house, would be of little use in relation to reputed congestions, indurations, and hypertrophy, unless connected with the symptoms during life.

In the treatment of the aforesaid symptoms, he laid great stress on the administration of steel with ammonia, the mineral acids with tonics, baths, the hip and shower, hot or cold, combined in some cases with sedative or astringent vaginal injections, and occasionally leeches to the ovarian regions. He thought that cures were attributed to the cauterisations, whereas they were due to the general treatment. He had found no advantage in the application of solid nitrate of silver to the granular looking cervix, over a solution of the same substance. After briefly alluding to the method of using vaginal injections, and to the lengthened period required for cure by caustics, he concluded by stating, that he hoped he had succeeded in proving that cauterisation of the cervix uteri is not unattended with danger, and that, so far from its being useful, it had, so far as his experience had gone, been positively prejudicial; that in many diseases of the uterus, non-malignant and malignant, the speculum is not only not necessary, but positively injurious; that these symptoms occur for the most part in females of a highly nervous and excitable temperament, and that, for their cure, exciting modes of treatment must be avoided; that the causes are more or less under control; that these conditions of the cervix uteri do not run into malignant forms; that the diagnosis is, as a general rule, very easy; that these conditions, so far, at least, as he could learn, do not shorten life; that there was no evidence to show that these cauterisations ever do, single-handed (if the term might be permitted), effect cures. And lastly, Mr. Greenhalgh stated, that he had been informed by many intelligent and trustworthy general practitioners, that, although constantly treating cases with the aforesaid symptoms, yet they seldom, and in many instances never, used the speculum. He added, that he did not mean to affirm that the speculum was never necessary; but if so, it was in a very limited number of cases.

A somewhat angry discussion, which at times became almost personal, followed. The principal speakers were Dr. Murphy, Dr. H. Bennett, Dr. Snow Beck, Dr. King, Mr. Hird, Dr. Tilt, and Mr. Greenhalgh. Great surprise was expressed by Dr. H. Bennett at the large number of cases in which the author had used the speculum, and amazement at the paucity of cases in which cause for its use had been discovered. He said that no one was justified in employing this instrument, unless he had a firm conviction that a disease existed requiring surgical interference. He himself did not use it once in three months without finding disease. He was surprised at the paucity of local disease discovered by Mr. Greenhalgh, which did not accord with his own experience, nor could he agree in the therapeia recommended. He had found that constitutional treatment, although it might amend, would not cure without surgical applications. The disease would otherwise certainly relapse. He had never seen any such results from the application of potassa fusa, as those depicted by the author, and thought that he had used it in cases of acute, instead of chronic, inflammation. By Dr. Snow Beck, Mr. Greenhalgh's statements were fully confirmed. He considered the use at present made of the speculum improper, and often detrimental. He then spoke of the alleged ancient origin of the instrument, and showed the error of the statement on anatomical and pathological grounds. By the term os uteri the ancients indicated the vulva, and not that part which is now so called. He also alluded to the infrequency of ulceration of the cervix, and defended his position by the anatomy of the parts. He then spoke of the statements in works referring to this instrument, and said if they were true, not only had it been used for virgins, but also for female infants—of proportionate size of course; an instrument, 2½ inches in length, had been thus used. He concluded by remarking, that the speculum is frequently employed when it is not required. Cases of ulceration are very rare, not more than one in five or six hundred, and for these only it should be reserved. The remark made by Dr. H. Bennett, that clear evidence of the existence of local disease should be obtained, before the speculum was used, was confirmed by Dr. Murphy, who further defined what was meant by ulceration of the cervix, *i.e.*, a florid, red, circumscribed granular spot, such a state as is found in

the conjunctiva, and in the throat. The surface is but little raised, on account of the delicacy of the membrane, and paucity of cellular tissue, but its elevation is more and more marked as the disease advances. The neck of the uterus becomes indurated, and increased in volume, causing general disturbance of the health, which can only be met by local treatment. Constitutional measures may, and should be applied at the same time. He had never seen any bad results from the use of potassa fusa,—but if it be not carefully applied, the vagina may also be cauterised, and injurious consequences follow. Every thing had tended to convince him that the speculum was a valuable means of diagnosis, and that without it, in many cases they would be unable to recognise the existence of disease.

The further discussion of the question was adjourned soon afterwards, the speaker in moving the adjournment, indulging in language of strong invective against the author of the paper, such as we should be very unwilling to transfer to our pages. For the same reason we conceal the speaker's name, in the hope that such conduct will not be repeated. Nothing was elicited at the adjourned meeting which rendered a report necessary.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday, February 22, at 8 P.M.
MEDICAL & CHIRURGICAL,	Tuesday, do. 25, at 8½ P.M.
ZOOLOGICAL,	do. do. 25, at 9 P.M.
GEOLOGICAL,	Wednesday, do. 26, at 8½ P.M.
ROYAL,	Thursday, do. 27, at 8½ P.M.
KING'S COLLEGE (Medical),	do. do. 27, at 7½ P.M.

[*The Influence of the Study of Medicine on the Moral Character.* By Thomas MacKnight, Esq.]

ROYAL INSTITUTION,	Friday, do. 28, at 8½ P.M.
MEDICAL,	Saturday, March 1, at 8 P.M.
MEDICO-CHIRURGICAL,	Saturday, do. 1, at 4 P.M.

[*The Anniversary.*]

THE INSTITUTE MEDICAL JOURNAL.

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THE INSTITUTE.

LONDON, SATURDAY, FEBRUARY 22, 1851.

UNION, steady perseverance, and a firm resolve to win the battle, are alone wanted to ensure the General Practitioners that victory which justice and fair dealing must eventually award them. After six years of agitation, we find that important section of the medical profession labouring under the same disabilities, urging the same claims for redress, and praying in the same firm, energetic, yet respectful terms, for the interposition of the legislature in their behalf. The reform measure of the National Institute, has not yet become the law of the land; but we believe most conscientiously that the principles that guided the great committee of the National Association, and the able Council of the National Institute

are now on the eve of achieving a most triumphant vindication,—the more complete and enduring from the severe and searching ordeal to which they have, for so long a period, been so unfairly and unscrupulously subjected.

Although the General Practitioners have not yet obtained the ultimatum of their desires, their position is materially different from what it was six years or even six months ago.

The appeals to the Government have not been altogether in vain, and the true position of that important body has been faithfully represented by the Council of the National Institute, who, in our opinion, deserve the thanks of the whole profession for the patient and disinterested zeal they have evinced throughout. The Government are at length sensible of the anomalies which exist, and difficult as the question is, they are satisfied that no comprehensive measure of Medical Reform can be carried out without making the General Practitioners a *primary* consideration. If this one point were all that had been gained, we should still have reason to congratulate the General Practitioners; but it is not so; gradually the unexceptionable principles advocated by the National Institute are gaining ground. The existing corporations are beginning to discover their intrinsic worth. The College of Surgeons of Edinburgh have signified their intention to support the New Medical Bill, and in a recent number we published their resolutions.

We have grounds also for believing, that the National Institute are anticipating the support of other corporations, and that speedily. The Apothecaries Society, we trust, are taking steps in the same direction, for we do not see how, in the event of the New Bill passing into law, the able services rendered by this body could be overlooked. With these prospects, let not the General Practitioners imagine their labours have been in vain. The measure of reform which is needed in the medical profession, has been discovered to be one which shall embrace the whole profession, in its widest range—hence the slowness of its progress. Let not the General Practitioners forget that they have now an organ for expressing their sentiments, and vindicating their just claims.

NEWCASTLE MEDICAL SCHOOL AND THE UNIVERSITY OF DURHAM.

THE Newcastle-upon-Tyne School of Medicine, in conjunction with the University of Durham, is about to assume an important position. This school was founded in 1834; in 1836, it was acknowledged by the Royal College of Surgeons, and the Apothecaries' Society, and in 1839 by the London University. The old building, the ancient Hall of the Incorporated Company of Barber Surgeons was pulled down to make room for the railway, and arrangements were made for rebuilding the Hall in another part of the town, the foundation stone of which was laid a short time since. It appears that the University of Durham has a charter similar to that of the University of London, but it has not yet availed itself of the privilege of granting degrees in medicine.

This privilege the University is about to exercise, and a proposition has been made that all the Medical Schools in the North should unite themselves with the Durham University; what the result of this may be, it is difficult to say, but we shall report proceedings from time to time.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLV.—VERY REMARKABLE CASE OF ECSTATIC SLEEP. REPORTED BY MONSIEUR SANDERET, PROFESSOR IN THE MEDICAL SCHOOL OF BESANCON.—Mr. Editor,—I have the honour of communicating to you the particulars of a case rendered remarkable by those accidents to which science has given the name of extacy, and which appears to me to possess more than ordinary interest. The duration and obstinacy of the attacks, their regularity, and the eccentric character of this particular case, inviting and permitting an attentive study, have rendered all fraud impossible. The name which we have given it can scarcely be objected to, but somnambulism or extacy, what matter?

If, Sir, with me you judge this case worthy the attention of your readers, as a remarkable example of certain phenomena relating as much to philosophy as medicine, I beg you to dispose of it as your own, and to make such use of it as you may deem most in accordance with the object and spirit of your journal. One word more. On reading certain particulars, it may be foreseen that inexperience and credulity will regard the whole story as marvellous. How will a case which so strangely avoids the usual forms of this malady be received in the list of simple morbid cases? The cry will then be raised, Behold a miracle; pilgrimages have commenced. I am glad, however, to perceive, as far as I can judge, that there is more caution on this point than I would have given the age credit for. I need not say that the extra-medical part of the story is not my affair. If, in my statement, I describe miraculous circumstances, it is because they belong to the true physiognomy of a fact, which I have not the right to simplify by falsifying.—ED. SANDERET.

In the village of Voray (Haute Saône) twelve or fifteen kilometres from Besancon, lives a girl named Alexandrine Lanois, 17 years of age. Her face is inexpressive, her manners simple and amiable, and until the occurrence of the circumstances I am about to relate in due order, she had in no way attracted attention. Her parents were poor, and she lived by the work of her hands, and assisted her mother in her household duties. In a word, to use the expression of her curé, she was a very insignificant young person.

In the month of February, 1850, the girl was attacked with pleurisy, for which she was treated and cured; but towards the end of the same month, she had a relapse which demanded renewed care, and was immediately followed by intermittent fever, at first quotidian, subsequently tertian, and yielding after fifteen days resistance to sulphate of quinine. When this malady had totally disappeared, in the beginning of June, nervous attacks came on, accompanied with symptoms of hysteria, the fits recurring twenty or thirty times a day, lasting only a few minutes. The patient lost consciousness, and in this condition seemed to be subjected to the most extraordinary impulses, so that it required several persons to control her. These new phenomena lasted but a few days, and disappeared during the employment of antispasmodics. At the end of July, the *extacies* commenced. Before describing one of these fits, of which I was witness, I will indicate the essential facts. Each attack was strictly periodical; she slept for twelve hours, and the waking interval was twenty four. All means recommended by the physician, such as motion, dancing, diversions, muscular efforts, &c., were ineffectual; the attack commenced and terminated invariably at the fixed moment. She would even say when the fit was coming on, "*I am going*;" and on returning to herself, she would declare she had seen paradise. During the fit, she repeated prayers, and sang sacred songs. In about twelve days the journeys were ended: cold baths had been employed.

I am indebted for the preceding details to M. Jeunin, a very intelligent physician living at Voray, who had attended Alexandrine Lanois from the first.

Six weeks afterwards, in the month of October, the attacks returned, but the order of the phenomena was inverted; the fits continued twenty-four hours, and the interval was but twelve.

It was at this time that, while passing through the village, I was entreated by a pious lady to come and see the "*marvellous*" girl. It was nearly four in the afternoon, and I was told to use all speed if I wished to see the girl awake, as the fit would return at four o'clock. I ran to the place, and entered the small dark room, which was crowded with persons anxious to see her "*depart*." I looked at my watch, it was two minutes past four.

She was extended on her bed, face perfectly calm, eyes closed, and the lids in incessant motion, the limbs flexible, and when raised falling gently down; her respiration was equal and regular; pulse quick.

Her hands nearly met upon her breast. In a few minutes she commenced slowly and gently to rub them. "*She is going to sing*," exclaimed her mother, and she accordingly began, without effort, a canticle in a full vibrating voice, but which was quite unnatural to her, and though the chant was of rustic character it was throughout pervaded with strong musical feeling. The song, which was rather long, being finished, Alexandrine resumed her immobility. On my raising the lid the eye quickly avoided the light, and the repetition of the attempt produced tears in the external corner of the left eye. I pinched her severely, but she appeared to feel nothing. I ran a large pin into her hand with the same result; the insensibility was complete.

When some minutes had elapsed, the patient made movements, the object of which seemed, as indeed the result proved, the removal of the coverings at the foot of the bed. "*She is going to rise*," said her mother; and, indeed, with an air of ease and even of grace, she arose *without the aid of her hands*, attained the sitting posture, and then, without deranging a fold of her white petticoat, she placed herself in a kind of niche, or frame formed by the curtains. Her head inclined a little to the left and forwards, the two arms hung, the inferior parts turned from the body; the palms of the hands also turned outwards, the left leg a little inflected, and the body slightly retiring. She thus presented the exact attitude of an image or statue of the Immaculate Conception, well known in this country, and I believe everywhere, for it is classical. I cannot describe her appearance more exactly than by referring to this image, and truly her *pose* was nature itself. Alexandrine then repeated several prayers, but, unlike that of the song, her utterance was hurried, confused, and unintelligible. I raised the arms repeatedly and successively at right angles: they fell again gently and gradually, with a motion more exact than if the result of volition, and the hands resumed their position. I made several attempts to turn the fore-arm towards the body, and the palms of the hands inwards, but the statue ever reappeared. At length, with irreproachable demeanour, she returned to her bed and resumed her immobility, to re-commence in a short time the same manoeuvres.

The patient appeared fatigued by the various experiments I had made on her; her forehead was covered with sweat, and her mother was surprised at the unwonted expression of suffering her countenance presented. I passed an hour with the patient.

The mother, who appeared to care but little for the miracle, as she really wanted the services of her daughter, the eldest of seven children, entreated me to endeavour to cure her. The patient had, however, announced some days before, that the fits would cease on the following Saturday (I saw her on Thursday). I therefore refused to act in the interval, promising to give my aid in the event of the attacks continuing beyond the appointed time.

I returned on the following Sunday to Voray, led thither by curiosity easily understood. The extacies had ceased. Alexandrine was awake, and told me the attacks would not return for some time, but she mentioned no fixed period. I questioned her concerning her journeys to heaven, asking her what she had seen. "She had seen the good God, who was all white," she said; "the angels &c., and heaven was of gold and silver." All this did little honour to her imagination; and, indeed, when herself, the girl appeared simple, gentle, timid, of very moderate intellect, and free from artifice.

I promised her to use my best endeavours for her recovery, should her illness return; and she embraced my offer with apparent gratitude, engaging to me give timely notice.

On Thursday December 26th, the physician of Voray wrote to me: "Our young *extatique* requests me to tell you that her fits will return on Monday; a voice has announced this to her." On Monday the 30th, I learnt from two persons worthy of credit, that at eight o'clock on the morning of that day, Alexandrine had "*re-commenced her travels*."

An event more marvellous than all that had preceded it, and which, as a faithful recorder, I am bound to relate, had revived and confirmed faith in the miracle. It derives its chief interest in *our* estimation, from the announcement of the precise time of the return of the fits.

Thus then, Alexandrine one day, sad, absent, indescribably oppressed with a vague indefinite feeling and a desire to weep, went, in the hope of recruiting her spirits, to visit one of her companions living at the parsonage. She was walking with her head downcast, when a lady dressed in white, stood before her, whom she at first took for an inhabitant of this world, but, raising her eyes, she recognised the Virgin by her crown. The Virgin spoke with her for some time, predicted the return of her fits, which were to be unusually prolonged, and gradually vanished, letting a rosary fall at her feet.

Alexandrine entered the parsonage weeping, and with an effort

related this wonderful adventure, in proof whereof the rosary was found before the door, one worth about two sous.

Thus the phenomena have multiplied in complication up to this event, the significance and weight of which the reader may conceive, remembering that the curiosity of which the girl is the object, has continued to increase, and that the attention she excites is beyond all bounds.

On the 5th of January, my honoured friend and colleague M. Druhen, accompanied me to Voray. He found the facts such as I had described. In order to assure himself of the reality of certain phenomena he repeated my experiments, and in addition tried the effect of a bottle of ammonia held to the nose, which produced no result. He even magnetised the patient and interrogated her in vain. The pulse was 112, the respiration 22. The fit, always strictly periodical, lasted thirty-six hours, as the white lady had said, and the interval twenty-four hours. During their continuance (as was the case in the first attacks) there was no discharge of fæces or urine, the bladder remained empty to the last. In the interval the health, appetite, &c., are much as usual.

The regularity of the attacks demanded of us, so to speak, antiperiodic remedies, which we prescribed to the exclusion of all others.

Here is, then, the simple statement of the facts. Viewed therapeutically, it possesses but secondary interest; it is not as a practical example that we would occupy ourselves with so exceptional a case; it remains for observation. New considerations may arise, and I will hereafter give fuller particulars, if, indeed, you have not already deemed too long, details which I have not known how to abridge.

P.S. I have this morning received from my young fellow-practitioner at Voray the following communication:—

"I myself administered the sulphate of quinine to the girl, Lanois, on the morning of the 6th of January. 75 centigrammes of this salt, divided into two doses, were given. On the evening of the same day, at eight o'clock, the fits re-appeared and lasted thirty-six hours as before. On the evening of the 8th, before the anticipated return of the fits, I gave the same dose of sulphate, divided as before. On the following morning, there was another attack, and the menstrual discharge appeared. Lastly, on the 11th, at half-past seven o'clock in the morning, I again administered 75 centigrammes, and in the evening our *extatique* departed for the unknown regions."—*L'Union Médicale*, January, 1851.

[This case we have given in full. It is related by Professor Sanderet, and although there are some few things stated which look amazingly like priestcraft, yet we have no intention of charging Monsieur Sanderet with want of truthfulness. Most of our readers must be aware that the subject of the Immaculate Conception has engaged the attention of Roman Catholics in a more than ordinary manner of late, owing to his Holiness the Pope having recently made it a doctrine of the church. This may explain, in some degree, the peculiar character which the disease assumed at one moment; but there can be no denying that certain extra-ordinary phenomena appeared, which we leave to the consummate genius of a Marshall Hall to elucidate. We hope to be able in a future number to give a further account of this interesting case.—EDITOR.]

CLVI.—TWO REMARKABLE CASES OF ABSTINENCE.—By DR. JULIUS S. TAYLOR, of Carrollton, Montgomery Co., Ohio. (Read before the Montgomery Medical Society, November, 1850.)

Case I.—Mr. B. H.—, aged 50, the father of a large family, had always enjoyed good health, and had been an industrious and active man. He was given to speculations, in some of which he had been successful, in others had lost. His losses, however, preponderated to such an extent that in the year 1841 he found himself nearly reduced to bankruptcy. His creditors became uneasy, and "pushed him"—which harassed him exceedingly. He lost his appetite; bowels became costive; skin yellow and dry; tongue relaxed and buffy-coated; pulse small and irregular. In connection with this train of symptoms, he became melancholy and strange in his behaviour, which in the estimation of some of his most intimate friends, was looked upon as affectation or wilfulness. These symptoms having continued for several weeks, his anxious wife became alarmed, and sent for me as his medical adviser. I visited him on the 7th day of February, and found his general appearance as above stated, and further, a great unwillingness to converse with strangers, or even with his family. With me, however, he conversed quite freely, and gave me a satisfactory answer to all questions in reference to his situation; assuring me, however, that my examination was useless, "as medicines would never do him any good." I became satisfied that his disease was

purely mental, and advised, at once, an effort to be made to obtain a place for him at our noble State Lunatic Asylum. But, upon the correspondence of some friends with the then worthy superintendent, it was found to be impossible to gain admission for him.

During the time occupied by the correspondence, I instituted such treatment as the symptoms seemed to indicate, and continued them for a few weeks, until it seemed to be absolutely nugatory, when I discontinued, and gave only advice in the way of persuasive treatment. During this time he became unwilling to converse with any person but myself, and in the month of February ceased to speak even to me. He then began to lessen his food, yet his general symptoms had changed but little, if any; and after a few days, he ceased to eat or drink for ten successive days and nights. Neither persuasion, tears, nor threats, could induce him to eat or drink during that time. On the tenth day I visited him, and after talking for an hour, and asking many questions, all without the least answer or change of countenance, I then proposed to drink a glass of water with him. To this he at once consented, but said that "it must come directly from the spring in a bucket." The water was brought, and upon my proposing to drink a glass with him, he said, "You drink a glass full, and I will take the bucket." He put the bucket to his mouth, and did not take it away until he drank a little over half a gallon! This large draught of cold water produced a most violent chill, during which I proposed to him to drink some wine, to which he consented, provided I would drink "a teacupful first." It was a large dose for me; but still duty said drink, and I did; and he then drank another. The chill soon subsided, and I urged him to eat some food. This he resolutely refused to do, but agreed to visit my house the next day in a carriage, and dine with me upon "turkey."

According to agreement, his friends brought him to my house, and when dinner was ready he was seated at the table, but refused to eat. I suggested to a friend to help Mr. H., as he was feeble, and he would eat. Upon that suggestion he was helped, by putting the food to his lips, which he readily took in, after the first offer, which he resolutely refused for some time. At this meal he ate heartily of turkey, potatoes, bread, coffee, and some pie, without speaking a word, or refusing anything, until I thought he had been bountifully supplied, for the time.

During the ten days' abstinence he walked occasionally around the house, and his countenance was unaltered. His bowels had been moved once or twice during the time, and he passed urine also. He did not groan or complain in any way; nor did he speak, or seem to notice anything that was passing in his family. While he was at my house, I endeavoured to divert his mind and excite him to speak, but did not succeed. After waiting a reasonable time after dinner, his friends put him into the carriage and returned home with him, and left him exhibiting the same determination not to eat, drink, or speak.

From that day he again desisted from food or drink, or speaking, for fourteen successive days and nights; during which time he appeared not to be weakened; nor did he present a feverish or excited appearance. His bowels were evacuated but once during the time, and he passed urine only three times. He slept generally well, and could be removed, or would move himself when asked so to do, and walked round the room occasionally during the day time. On the fifteenth day, he yielded to the solicitation of his wife, and drank a small quantity of water, and walked up stairs to a more convenient room; and after a few days, spoke a few words to his wife, but again refused to talk to any person, or observe anything that was passing around him. Yet he would drink a little water with some milk in it; but not more than a gill a day, to the greatest extent, and oftentimes refusing this for several days at a time. This state of affairs continued, in spite of the anxious solicitations of an amiable wife and children, and all that kind friends could invent for his relief, until his death, which was on the 19th of May; he having lived about one hundred days in an almost constant state of abstinence.

During the above period, I called upon him, and recommended what, under the circumstances, seemed to be advisable. I had him taken to ride occasionally, when it could be done without too much force; gave him an injection of demulcent articles when this could be accomplished; sponged his body over, and oftentimes tried to give internal remedies, but always ineffectually. He did not seem to have lost his reason, however, to any great extent; or, at least, his friends so thought; but he had a fixed determination to die, if possible, by abstinence.

During the period which elapsed after his last total abstinence, until his death, he did not present any symptoms of pain or disease. His eyes were as bright as usual; his skin cool and natural; his urine was evacuated every ten days; but his bowels were not

moved oftener than once in from eight to fifteen days, and then but very slightly. His flesh, which, when he was taken, was moderate, he weighing about 165 pounds, continued to diminish gradually until he was a perfect skeleton. He walked around the room occasionally until three or four days before his death, when he laid down and slept, and waked, without any change in the appearance of his eyes, until he died like one going to sleep.

Case II.—The next case is that of Mr. J. S—, aged 26 years. He had been a steady and very industrious person during his life; always attending to the directions of his parents and elder brothers, as their government was extended over him. His health had been good during his boyhood, which enabled him to perform all the various labours incidental to an agricultural life. After his father's death, he went to learn the carpenter's trade, at which he continued until his last illness, enjoying good health, except for a few days in the year 1849, when he consulted me for a disturbance of his bowels, which soon passed away. He showed at the time, however, slight mental derangement for a few days.

In the month of January, 1849, he consulted me again, in reference to pains in his bowels, and slight headache—pupils of his eyes considerably dilated, and presenting some slight appearance of mental derangement, which appeared in his singular questions, &c. I prescribed for him, with apparent relief and satisfaction, several times, until he supposed himself well. I did not hear again from him again for several weeks, when I was summoned to see him at his residence. Found him with slow pulse (65), irregular, and having a chill, followed by fever every other day, pupils dilated, bowels costive, and urine scanty. After prescribing, as I believed, appropriately, these symptoms subsided, and were followed by strong emotions of *fear*, mostly of dogs, and marked mental derangement. For the relief of this, appropriate remedies were prescribed, and immediate application was made to the superintendent of our State Lunatic Asylum for his admission there. But it was found, at that time, he could not be admitted. I gave him such remedies as the case seemed to require, until it appeared to be hopeless, when I left him under the charge of a most careful mother, and brothers, and sisters, all of whom were assiduous and devoted in devising and applying all things for his relief and cure. His mental derangement increased; he became restless, and exceedingly fearful, frequently imagining dogs to be chasing him, when, one day, in the momentary absence of friends, he plunged headforemost through the window of an upper story, and fell about twelve feet to the ground. He did not suffer from the fall, and he continued as before, gradually becoming more averse to moving, until, when the family thought it proper for him to take a ride, they had to employ force. He now began to lie continually in bed, without talking, and eating only a little once in about two days, and drinking a little water. He spoke but few words, in a feeble voice; pulse quick; skin cool; gave no signs of pain or sickness; his flesh gradually wasting away. This state of affairs continued until fifty-one days before his death, when he positively refused to eat or drink; which determination continued for twelve successive days and nights, and then he asked, with a good voice, for some water. A little was given him, which caused him to vomit; but, after trying it a few times, it remained on his stomach. From that time, for thirty-nine successive days, he drank a very small quantity of water, not to exceed one gill in twenty-four hours, but did not taste one particle of food during all the time; thus having lived one year, eight months, and sixteen days, in an almost perfect state of starvation, and fifty-one days without food of any kind. He died on the 29th of September, 1850. For the last seventy-two days prior to his death he had no fecal evacuation, but passed urine in small quantities every three or four days.

Cases of long continued abstinence must be of exceeding rare occurrence, for I find but four cited in all the numbers of that valuable record of our science, *The American Journal of the Medical Sciences*, from beginning to end. The first case is in vol. vi., page 543, of a young man who lived fifty-four days on water alone. The second case is in vol. ix., page 479, of a criminal, who lived sixty-three days upon water, but had convulsions, &c. The third case is in vol. xvii., page 497, of a female, who is said to have lived a year on water. The fourth case is in the *New Series*, No. xix., page 172, of one who lived ten days. In vol. x. of the *Eclectic Repository*, page 326, I find a case reported as remarkable for the patient's preservation after an abstinence of twelve days. In *Good's Study of Medicine*, vol. i., page 84, I find quoted several cases of very long abstinence—one of fifty-two days, one of sixty-one days, and others which are said to have existed even for years, on water alone.

These cases, as well as those reported by myself, prove the inaccuracy of the vulgar belief that a person cannot live beyond nine days without food or drink.

[*Remarks by the Editor.*—The preceding cases are extremely interesting, and are among the most remarkable, for the length of time that abstinence was borne, that are to be found in the annals of our science. It is a curious problem, but one which does not admit of any precise solution, what is the extent to which abstinence can be carried. Numerous instances are on record of abstinence for an extraordinary length of time; and although many of these are indebted for the credit they have obtained to the love of the marvellous, natural to the human mind, there are others, sustained by such satisfactory evidence, so carefully observed, every source of error guarded against, that we cannot refuse them our belief. Thevenot asserts that the Arabs can remain five days without food; and others that the Tartars support abstinence for fifteen, sixteen, and even seventeen days. A woman survived nearly eight days, buried in the snow without food. (Okes, 'Duncan's Annals,' iv. 500.) A young man, confined in a coal-pit, by a sudden burst of water into it, remained twelve days without any other sustenance than a little water, which trickled down a rock and was collected by him in the hollow of his hand. (T. T. Griffith, 'Lond. Med. and Phys. J.' Feb. 1830, and 'Eclectic Repository,' x. 327. Philadelphia, 1820.) A woman who lost her way in a coal pit, remained for eighteen days without any nourishment, except a little of her own milk for the first three days, and water subsequently. (Rankine 'Annals of Med.' viii. 492. Edinburgh, 1804.) A maniac in the lunatic asylum at Montrose, often abstained from every kind of food, both solid and liquid, for fourteen days in succession ('Ann. of Med.' v. 383), and Plot speaks of a melancholic person who fasted for the same period. Cheyne states that a phthisical patient lived thirty days upon water with a little nitre dissolved in it. ('Diseases of body and mind,' p. 109.) Dr. Francis quotes the case of a negro woman who, supposing herself affected with *Obi*, refused all sustenance for seven weeks, during all which period she took for her support only about two cups of water slightly medicated with wine. ('New York Med. and Phys. Journ.' for 1823, ii. 21.) A young woman whose case is reported by Dr. Eccles ('Med. Ess. and Obs.' v. art. xliii.), was affected with spasms of the oesophagus to such a degree as to be unable to swallow, and remained thirty-four days without taking any nourishment. The spasms then abated, and she continued to take some food for about three weeks, when the spasms returned, and for fifty-four days she was unable to eat or drink. In a case related by Prof. McNaughton, a man lived 54 days on water ('American Journ. Med. Sci.' vi., 543); and in another quoted by Valisnieri, the patient lived for seventy-six days. Borelli ('Cent.' iii., Obs. 35) gives an account of a case in which abstinence was continued for three months, and Mercardier ('Journ. de Méd.' xxiii., 133) quotes another, prolonged for six months. Many instances of even more protracted abstinence are recorded. Schmals relates two cases, one of a female who lived two years and a half without food or drink, and another, a female also, who was still alive at the period of his report, who had not eaten or drunk for six years. [See 'Am. Journ. Med. Sci.' for Nov. 1833.] In a case related by Vandermonde ('Journ. de Méd.' xiii. 158), abstinence was protracted for twenty-six years; but the most extraordinary of all, is the one related by the Rev. Mr. Steill ('Med. Essays and Obs.' v., art. xlv.), in which the patient lived for fifty years, upon a little whey, or milk and water. Haller has collected many cases of this description, and a still greater number has been recorded by subsequent writers. The cases, however, we have alluded to, most of which have an appearance of authenticity, are sufficient to show that it is utterly impossible to fix the limits to which abstinence in the human species can be carried.

The experiments of Magendie on animals, belonging to genera near to man, show that they cannot support abstinence beyond fourteen or fifteen days. Some large dogs, however, subjected to abstinence by M. Collard de Martigny, lived three, four, and five weeks, and even longer. This last experimentalist also found that the younger the animal the shorter was the time that they could support abstinence; and the smaller the animal, whether of the same or different species, the shorter the period they could live without food. Of some capons subjected by Redi to complete abstinence from food and drink, none lived beyond the ninth day. One of these animals, however, to which he allowed some water, lived to the twentieth day. ('Dict. de Méd.' 2d ed., i. 286.)

Most of the remarkable cases of abstinence we have cited, and the greater number of all those recorded by writers, were in sick persons; and daily observation shows, that abstinence can be supported with greater ease in sickness than in health. Of all diseases, insanity and melancholy allow of the most protracted fasting. It is in hysteric or melancholic girls, that instances of the longest abstinence have occurred. Hard study, the ardent pursuit of objects, love, ambition, exalted devotion, all powerful excitements

of the brain, cause a forgetfulness of the wants of reparation. It is reported of Sir Isaac Newton, that when immersed in his studies he would forget his meals. Sleep is also favourable to protracted abstinence; it is well known that hibernating animals, as the marmot, &c., live without food during a whole season.

It may be laid down as a physiological axiom, that the more actively the organic actions are performed the more urgent and imperious will be experienced the necessity of reparation. Hence in early life abstinence cannot be borne so well as at a more advanced period. Hippocrates observed that the younger a person is the more irresistible is the sensation of hunger; and the experiments of Collard de Martigny, as we have already stated, show that the younger the animal the sooner it dies from privation of food.

Women appear to support abstinence better than men, since we find more instances of prolonged abstinence in the former than in the latter. This may arise from women, generally, taking in health less food than men, and from their suffering less loss by secretions, in consequence of their less active life.

Cold would seem to be very favourable to prolonged abstinence, by its lessening all the organic actions, and abating the losses by perspiration, &c.

Moisture has also been supposed to be favourable to the prolongation of abstinence, in consequence, as some think, of absorption taking place in the lungs, and, according to others, from the skin. Be this as it may, the length of time which persons confined in damp places have endured abstinence, seems to support the idea that moisture is somehow favourable. Various other circumstances, as the constitution of the individual, and his habits, the seasons, &c., exercise an influence upon the duration of abstinence; but we are not in possession of a sufficient number of facts to enable us to determine positively their precise effects.—*American Journal of Medical Sciences*, 1851.

CLVII.—CASE OF SPONTANEOUS CURE OF A TUMOUR IN THE RECTUM OF A CHILD, WHICH WAS TREATED FOR PROLAPUS ANI. Reported by W. D. MOORE, M.B.—In March, 1850, I was consulted by Mrs. E. about her son, a remarkably fine and healthy boy, then aged between four and five years. She stated, that at the time of each alvine evacuation the gut protruded, and the case was considered to be one of prolapsus ani. Under the use of an astringent lotion and the other ordinary means, the symptoms subsided, but returned in the course of the summer, when Dr. Johnson was consulted. The supposed prolapse continued to occur every time the child went to stool, until 1st December; it was easily returned, and never took place except when the bowels were moved. In consequence of this, and his subsequent absence from town, the prolapsed part was never seen by any one except the mother or nurse. Slight hemorrhage occasionally occurred, but the child enjoyed good health; his bowels were regular, and his appetite good; yet, although he had the advantage of spending the autumn in the South of Ireland, at the sea side, he looked less healthy than he had done before he became liable to this affection. On the 1st December, immediately after having been at stool, something dropped from him, which was found to be a hollow fleshy tumour, of a firm consistence, about the size of a cherry; and on examining him, no trace of the prolapse could be discovered. When the bowels acted next day a quantity of clotted blood was passed, and nothing like prolapse has taken place from that time to the present date.

Tumours in the rectum are extremely rare in such young children; and I believe there has hitherto been no case recorded in which nature was able to accomplish a spontaneous cure. It is not easy to say how the separation actually occurred, it could not have been by constriction of the sphincter, as the tumour was always immediately and readily returned, and for this reason no force capable of effecting its separation was ever employed; neither was the appearance of the tumour such as to lead one to attribute its removal to either of these causes.

I have been induced to place this case on record, because it is one of very rare occurrence, and because it shows the necessity of making, under such circumstances, a careful investigation, and of not relying on the reports of the friends and attendants. In consequence of the facility with which the tumour was always returned, and of the child having been for several months out of town, we had not an opportunity of examining it, or, of course, it could readily have been ascertained that the disease was not prolapsus ani. It is remarkable that the first symptom was the protrusion of the tumour, and that the child had never suffered from hemorrhoids or any irritation of the rectum at any previous period, nor had he ever had any attack of diarrhoea or dysentery.—*Dublin Quarterly Journal*, February, 1851.

CLVIII.—HYPERTROPHY OF THE ANTERIOR LIP OF THE OS UTERI, REMOVED BY OPERATION. By W. F. MONTGOMERY, M.D., Professor of Midwifery, &c., to the King and Queen's College of Physicians, Ireland.—I was requested to see the patient, whose case is here referred to, with the late Dr. Creighton, in the winter of 1848. She was about 35 years of age, had borne children, and her general health was stated to have been perfectly good; but she had latterly been constantly complaining of symptoms of uterine disturbance, which caused her great distress and uneasiness: she had pain in the back, with bearing down, and mucopurulent discharge. In short, her symptoms seemed to point to the existence of ulceration of the cervix uteri, to determine which, Dr. Creighton had made the requisite examination; and found that it was as he suspected; but that there was, in addition, considerable enlargement and projection of the anterior lip of the os uteri, which he at first expected would have disappeared under the application of caustic and other measures necessary for the treatment of the ulceration.

This, however, did not take place; and although the ulceration was improved, the distress experienced by the patient continued to increase, and he was anxious to have further advice, in consequence of which he requested me to visit her with him.

She was now complaining of constant uneasiness of a peculiarly irritating and distressing kind; a sense of weight and pressure, as if the womb was continually descending; and she said she felt as if there were some pointed and hard foreign body in the vagina forcing its way backwards: intercourse so aggravated her annoyance that it could not be tolerated.

On making a vaginal examination I found the uterus lying very low, with its anterior lip projecting at least three-fourths of an inch beyond the posterior lip, which was quite concealed behind it; the under and posterior surface of the enlarged lip was ulcerated, and its texture a little hardened, but not more than is usual in cases of long-standing ulceration and inflammation of this part; otherwise, the hypertrophied lip appeared quite free from any malignant affection, and to consist merely of the common uterine tissue unnaturally developed. But I gave Dr. Creighton my opinion, that excision must be resorted to before a cure could be effected, as I thought it altogether improbable that local applications of caustics or dissection would be adequate to the removal of such an amount of altered structure. He agreed with me; but as the patient was greatly alarmed at the idea of any cutting operation, and begged a further trial of other remedies, it was decided to wait, and try what might be accomplished by such means; and she was put on a course of hydriodate of potash, with Brandish's alkaline solution, and the enlarged part was touched with strong tincture of iodine, and several other applications of a similar character; but these measures did no good, and the patient was at length so annoyed with the incessant irritation, and so interrupted and prevented in following her necessary occupations, that, after three months, I was requested to see her again.

The ulceration was now very nearly healed, still the hypertrophied lip was no better, but rather worse; and on explaining to her the necessity for, and the painless nature of the operation, she readily agreed to its being performed.

Accordingly, on the 7th of March, 1849, I undertook it, assisted by Dr. Creighton and Dr. Hardy.

The patient was placed on her back, near the edge of the bed, with the limbs drawn up, and two broad curved spatulae being introduced by these gentlemen into the vagina, its parietes were held asunder, and the diseased part easily brought fully into view, when I caught it with a small pair of hooked forceps, drew it down, and with two strokes of a curved scissors it was removed.

She felt no pain during the operation; an artery seemed disposed to bleed very freely, but I applied to it a small roll of lint soaked with the *liqueur hæmostatique*, and filled the vagina well with dry lint. There was no further appearance of hæmorrhage, nor any unpleasant or unfavourable symptom of any kind: indeed nothing could be more satisfactory than her convalescence; and after a very short time she had completely lost every feeling of uneasiness, and the uterus had re-ascended to its proper place.

The amputated lip presented no morbid character, but simply the structure of ordinary uterine tissue somewhat hardened: but I should observe that its size and condition, as seen now preserved in spirit, are very different from what they were when it was attached to, and forming a part of the living organ, in which state it was much larger, with its vessels gorged with blood, and its structure partaking of the erectile character naturally belonging to the lower part of the cervix uteri.

On the 3rd of April, that is, four weeks after the operation, I examined her, and, by the touch, could discover no difference between the anterior and posterior lip; on applying the speculum,

I was very much surprised to find that the extremity of the anterior lip presented no appearance whatever of having been cut; but the cut surface was quite distinctly visible about a quarter of an inch higher up on the anterior aspect of the cervix.

This, however, I can easily explain, although I confess I did not at the moment expect to find it so.

While the process of hypertrophy was going on in the anterior lip, accompanied as it was by much increased action and irritation, the whole lower end of the cervix, including, of course, the posterior lip, had lengthened out, and the two lips of the os had, at the same time, closed in upon each other, the anterior, however, most so, and partially overlapping the other. When the latter was removed, and the unhealthy action put an end to, the whole tissue became diminished in volume, and the natural mucous surface of the anterior lip was by degrees drawn out and everted. Of course the cut surface receded and ascended in a like degree.

Any one who has been much engaged in treating ulceration of the lips of the os uteri, cannot have failed frequently to notice this process taking place from week to week as the ulceration heals, and the enlarged and indurated uterine tissue gradually assumes its natural condition.

I have only to add, that the posterior lip, which, at the time of the operation, was somewhat enlarged and elongated, was found to have also resumed its natural size and form; and many months afterwards, I was informed by the patient, that she was quite free from every trace of her former annoyances, and felt perfectly well.—*Dublin Quarterly*, February, 1851.

CLIX. — RELATION OF A CASE OF COMPLETE AND CONGENITAL OBLITERATION OF THE VAGINA, WITH IMPERFORATION OF THE NECK OF THE UTERUS; RESTORATION OF THE VAGINAL PASSAGE AND THE UTERINE ORIFICE; MARRIAGE; PREGNANCY; LABOUR AT FULL TIME; CONVULSIONS; APPLICATION OF FORCEPS; DEAD CHILD; MOTHER DIED ON THE TENTH DAY. BY M. DEBRON, Surgeon of the Hotel Dieu, Orleans, Corresponding Member of the Academy of Medicine and of the Chirurgical Society, Paris.—The young L., 19 years of age, middle stature, chestnut-coloured hair, breasts, chest, and hips well developed, had until the age of 17 enjoyed good health; but at this period she began to experience every month, in the loins and thighs, similar pains to these which announce the establishment of the menses. They, however, did not appear, but the pains and general *malaise* continued to increase at each menstrual epoch until the age of 19. On being applied to, to afford her relief, I confined myself to ordering leeches, mustard plasters to the thighs, and aromatic hip baths. Three months afterwards she came to me at Orleans, and informed me that the courses had not yet appeared; that during the last three months she had suffered more than ever; that at each period the pains she endured for several days were fearful; that, instead of regaining her health in the intervals, her sufferings continued; that she had lost sleep and appetite, and had become much thinner. She also told me of an increase of size of the abdomen, which she observed on the morning of her visit to me. I examined the abdomen, and found at the spot indicated by the patient, on the right side, a tumour of oval form, of the size of a hen's egg, painful when touched, and rolling beneath the hand. In addition to this, the hypogastrium was filled with another tumour, much larger, and rising above the pubis to within two fingers' breadth of the navel. This second tumour was round, slightly painful, firm, but, at the same time, somewhat elastic. The small tumour on the right side seemed as though attached to it. Percussion afforded a dull sound. I then came to the conclusion that the hypogastric tumour was formed by the menses which had not been able to escape, and that the smaller one on the right side was probably the ovary distended with blood. In order to form my opinion with certainty, I requested to be allowed to examine the external genital parts.

The pubis was abundantly covered with hair. The labia majora were well developed, but the smaller ones slightly developed. Between the nymphæ, the clitoris and the fourchette, which was a little confined by a transversal fold of mucous membrane, a slight depression without opening was visible, which occupied the place of entrance into the vagina. The orifice of the urethra, placed as usual, readily admitted a catheter. The perineum was about two inches in extent.

On introducing the finger into the rectum, I felt, two inches above the sphincter, a round resisting tumour, of the size, at the lower part, of a large walnut, and then suddenly attaining a large size. This tumour corresponded with that of the hypogastrium above described. The rectum instead of inclining forward by a regular curve, inclined backwards. On placing the left index finger in

the intestine, while I held a female catheter in the urethra and bladder, and made an effort to approach the catheter with my finger, I discovered that they were separated by a firm and resisting substance, between three and four lines in thickness.

This examination induced me to come to the conclusion—1st, that the tumour of the hypogastrium was owing to the distention of the uterus, by the accumulation of the menstrual discharge; 2nd. That the small moveable tumour on the right side of it, was caused by the ovary or Fallopian tube, being also distended with blood; 3rd. That the vagina, if not altogether wanting, was nearly so, and that its place was occupied by fibrous tissue; 4th. And finally, that if the patient would be saved from inevitable death, the fibrous tissue between the uterus and external parts, must be penetrated, and that therefore an operation must be decided on, which, although doubtless a little uncertain in its result, was imperative, and had often proved successful.

I had the girl examined by M. Vallet, senior surgeon to the Hotel Dieu d'Orleans, that I might have the advantage of his advice. His opinion in every respect coinciding with my own, we decided on operating, and that without delay, as the patient was now at a period corresponding with a menstrual epoch.

The next day, February 22nd, 1847, we proceeded to the abode of the patient, two leagues from Orleans, and commenced the operation as follows:—The girl being placed on the edge of the bed, the thighs separated and supported, as if for an operation of lithotomy, I began by emptying the bladder. I would have allowed the catheter to remain, but as it would have inconvenienced me in the operation, on account of the obliquity of the urethra, I abandoned it, and contented myself with placing my left index finger in the rectum, in order to feel and to avoid this intestine. The labia being separated, I penetrated, with the point of a bistoury, the centre of the space between the fourchette and the urethra. The tissue which I encountered was resistant and fibrous. I divided it very gradually, exploring with my finger the base of the wound from time to time. Having penetrated about an inch, I had hoped to find the tissues less tough, or a cavity, as is occasionally met with in similar operations; and I endeavoured to complete the operation with the nail and the handle of the bistoury, but the tissues being still very firm I was obliged to resume the instrument, and to divide with its point some lines further, when having penetrated two inches, I thought I felt at the bottom of the wound with my finger a round solid body; I employed the nail and the point of a large fluted probe, to separate the deep part, and I was at last able to lay nearly bare this protuberance, situated two and a half inches from the vulva. Little blood flowed. We now strove to discover the character of the projecting body at the base of the wound, and on exploring by the rectum and pressing on the hypogastric tumour, we ascertained that it was a portion of the uterus, probably the neck, since we were in that direction. If so, we had hoped that the menstrual discharge would escape; but there was no appearance of the kind, not even on pressing the hypogastrium, and it was impossible with the end of the finger, or with a probe, or a stilette, to discover the orifice of the neck. I merely thought I discovered a thinner point transversely situated, which might be the closed orifice of the os uteri. In any case, the course we had to pursue, was to penetrate to the uterus. I then slipped on my finger a narrow bistoury, covered with lint towards the handle, and reaching the tumour I pressed forward the point. The resistance was not great, and immediately a little coagulated blood escaped on my finger. I then introduced a female catheter instead of the bistoury, and a greater quantity of blood flowed through it. The opening appeared to me too small, and I enlarged it with a bistoury. I thus obtained an orifice of five or six lines, by which issued a very great quantity of semi-coagulated blood, like thick chocolate. This blood, which was very deeply coloured, was perhaps in quantity equal to two large glassfuls. Some of it was preserved, and the next day it was of a brighter red, and coagulated like blood drawn from the arm, with this difference, that it contained very little serum.

The opening made in the uterus was sufficiently large to admit the index finger, and I was able on introducing it, after the flow of blood, to ascertain the existence of an ample cavity, the walls of which were extremely smooth, as though covered with a coat of varnish. I also readily perceived, on introducing one finger into the uterus and another into the rectum, that the walls of the uterus were very thin.

The patient was at once relieved on the flow of blood. The hypogastric tumour diminished much in size, and gave immediately a clear sound on percussion. The smaller tumour, attributable to the ovary or Fallopian tube, had become less sensible and deeper seated. We ascertained that neither the urethra, the bladder, nor the rectum were implicated. A layer of tissue of

two or three lines thickness separated the cavity of the intestine from the passage made by the bistoury.

I injected the womb three times very gently. I also introduced a long tent of lint along the new vagina and penetrating the uterus, stuffed some lint into the vagina on the sides of the tent, and secured the whole with an appropriate bandage. Diet; barley water, &c.

February 23. The patient had suffered much during the night, from colic, and pains in the loins. The hypogastrium was painful, and had increased in size, although still much less than before the operation. The patient had passed water on the preceding evening, and again in the morning of the 23rd. I withdrew the tent and the lint, and a reddish liquid, marked with clots of blood, escaped, greatly to the patient's relief. She had had neither nausea nor vomitings. The fever was high. The pulse full, and 123. Two injections of mallow water in the uterus; same dressing as on the preceding day; cataplasm to the abdomen. I would have ordered a bath, had it been possible to procure one comfortably.

Wednesday, 24. Fever still higher. Pulse 135; countenance much excited. The patient has had violent pains in the hypogastrium, the groin, the loins, and bearing down sensations. Constant desire to make water, which was very painful, hypogastrium distended and tender to the touch. The tent was almost out. Two uterine injections. I substituted for the tent a gum-elastic tube, No. 8, carried into the uterus. Drew 12 oz. of blood; restricted diet; cataplasm; lavement with 30 grammes of mercurial honey.

Thursday, 25. The blood drawn on the preceding day was slightly crusted. The patient has suffered much less, and has slept three hours. The skin is moist; pulse 110. The lavement has produced a motion. The abdomen gives a clear sound, and palpation causes no pain except on the right side, where the small tumour is deeply felt. Examination by the rectum showed that the uterus is returning to its normal size. The labia present no more swelling than on the preceding days. Two injections by the tube, which has remained; cataplasm; broth.

Friday, 26. The patient has slept nearly the whole night, and suffered but little. The abdomen is free from pain, with the exception of the right side. Pulse 95. Two bouillons. Oil lavement.

From the 1st to the 5th of March. The patient has regained her sleep and appetite, which she had lost for two months. She made two light meals daily. The hypogastrium, although free from pain, still presented a marked distension of the uterus. From the 26th of February, I had sometimes substituted for the tube in the uterus a sponge in the vagina. On the 5th of March, I again introduced the tube and the lint on the sides.

March 18. I ascertained that the opening made in the uterus would no longer admit the tip of the finger, and would take exactly a probe No. 8, which penetrated two inches and a half beyond the opening of the neck. This latter circumstance indicates that the cavity of the uterus is still far from being effaced. There is scarcely any suppuration from the vagina, but a reddish liquid, mixed with thready mucus, flows from the uterus. I ceased to introduce the tube into the uterus, and confined myself to dilating the vagina, which is tolerably large, being at least three inches long. For four days the patient has left her bed.

March 20. Slight colic and pains in the loins, and symptoms which announce the approach of the catamenia, which I sought to encourage by foot-baths and mustard plasters. The flux, however, did not appear, and on the 24th all the precursory signs of the menstrual epoch ceased. I replaced the tube in the uterus, which remained until the 28th.

During the month of April, I saw the patient less frequently. I abandoned the use of the tube in the uterus, and confined myself to dilating the vagina by means of a prepared sponge, enveloped in fine linen, and which a sister of the patient renewed and introduced every morning. The patient's health continued, in other respects (generally), very good. The premonitory signs of the menstrual epoch did not appear at the usual time, viz., from the 20th to the 24th of the month.

April 26. Wishing to examine the parts, I placed a speculum ani in the vagina, and found, at about the depth of an inch, a circular septum, which hid from view the neck of the uterus. I cut this through with a scalpel, and in several directions, besides tearing with the finger and a fluted probe, several other deep bands, and I restored a passage sufficiently large, entirely to admit my index finger; but I was unable to discover the artificial orifice of the uterus. No accident followed this operation.

Eight days after, the prepared sponge, which was introduced every morning to dilate the vagina, was pushed out by a rather

copious flow of blood, partly liquid and partly clotted. This was the first spontaneous appearance of the menstrual discharge, which flowed during the 4th, 5th, and 6th of May.

I had, however, other difficulties to overcome; warned by what had happened, and by the contraction of the superior parts of the vagina, which I attributed to want of care in the dressing, I induced the patient to come and live near me at Orleans; and, on the 7th of May, I recommenced the dilatation of the vagina, with the view of preserving what had been gained, viz., a canal large and long enough to enable me to introduce the index finger. I sought in vain for the opening in the uterus. I confined myself to plugging the vagina every day either with lint or prepared sponge. On the 5th of July, the patient wishing to return home, I sent her a little hollow cylinder of box-wood, about the length of the finger, which I recommended the girl to place in the vagina, supported by a suitable bandage.

During June, July, and the following months, there was no menstrual discharge; and I was sent for in March, 1848, similar symptoms having come on to those which had rendered imperative the first operation. The uterus was again distended, and the little tumour in the right side, formed by the ovary, was still perceptible. It was evident that a fresh puncture of the uterus was indispensable; but, as the vagina was of sufficient dimensions, I regarded the incision of the uterus as a simple process, free from danger. I believed, also, it was possible to render permanent the aperture of the neck. And so the result proved.

March 29. I made a fresh puncture at the bottom of the restored vagina, as before, enlarging the opening with a bistoury. A few drops of blood followed; as on the first operation, no bad results ensued. There was scarcely any fever, and the patient left her bed in four days. On this occasion, having no anxiety regarding the vaginal canal, which was now nearly three inches long, in consequence of the retreat of the uterus after the evacuation of blood, I devoted my whole attention to the incision of the uterus. I used a large canula, which I changed daily, and by means of which I injected emollients and aromatics to cleanse the uterine cavity.

The menses failed in April, but they appeared on the 20th of May, after three days' warning, and since this period they returned regularly, flowing for three days, and preceded by the weariness and slight pains in the loins, common to females on those occasions. Appetite, sleep, and cheerfulness returned, and with these, *embonpoint*.

Consequences of the operation.—In the month of December, 1848, nine months after a cure which had proved permanent, the young L—, then rather more than 20 years of age, came to ask if I considered her in a fit state to marry. I had considered marriage as one day possible, and I had said so to the girl's friends, but I confess that this application took me by surprise. I thought I perceived that if I did not pronounce a formal interdiction, but simply gave a demi-prohibition, they would act in spite of my advice; I therefore suggested the prudence of waiting before taking any step, and exacted a promise from the parents to return to me, not concealing that I reluctantly yielded to circumstances which, while I desired, I could not contemplate without some degree of fear, but which I had not sufficient ground absolutely to prevent. The vagina, which was capable of permitting copulation, presented no obstacle to the marriage.

The possibility of conception, and its consequences, alone occupied me, and regarding this I had rather serious apprehensions; for experience, the best guide in such matters, had not, I believed, given judgment in a similar case. In the event of pregnancy, the neck of the uterus would undoubtedly present difficulties in the moment of delivery, but still these difficulties were not diverse from those which occur when the neck is accidentally closed after conception, and experience has given a favourable result in such circumstances.

However, in four months' time, without again consulting me, as was agreed on, my patient married. I learned this accidentally, when one day passing by her village I went to see her. Three weeks had elapsed since the event. I examined the parts which had been operated on, and now give the result of the visit, which took place February 24, 1849.

The young woman has become stout, and her breasts are surprisingly developed. There has been no retention or diminution of the menstrual discharge. Her health is excellent. There has been a discharge of mucus from the vagina, similar to whites. The vagina is rather more than three inches long, and sufficiently large easily to admit two fingers at once. The walls are soft, supple, depressible, and coated with a bright red membrane, analogous to mucous membranes. Towards the upper part, the size is rather less than in the middle and near the vulva. At the extremity is the uterus, pierced with a hole, which

readily admits the end of a female catheter. This orifice is circular, the edges hard and a little wrinkled—in other words, there was no neck. The bottom of the vagina, rather narrower than the lower parts, attaches itself round the orifice. The abdomen, which is firm, gives a clear sound from the navel to the pubis; and neither the uterus nor the tumour which I had supposed formed by the ovary, or Fallopian tube, is perceptible to the touch. On exploring the rectum, a round body is felt, rather larger than the cervix uteri; the finger does not reach the body of the uterus.

It was too late to blame the conclusion of the marriage, and I therefore declared they had done well in deciding on it. The young woman informed me that the husband had at first some difficulty, but that the result had soon been satisfactory. I quitted her with mingled feelings of hope and fear, meditating on the consequences which might ensue. She promised, if she became pregnant, to acquaint me with it. Again she forgot her promise, but the extreme interest I took in her case led me to visit her towards the end of April; I then learned that she had been pregnant nearly three months. The menstrual discharge had taken place from the 7th to the 10th of February: she had married on the 12th, and became pregnant immediately, or at any rate very shortly. The menses, which had not failed since the last operation, did not again appear.

The period of pregnancy passed without the occurrence of anything remarkable. The young woman's health was generally good. She had at first suffered from vomiting and heartburn; but there was nothing remarkable about the abdomen, which gradually increased in size as in ordinary pregnancy. The movements of the child commenced at four months and a half, and continued to the last. Towards the month of August, during the influence of the prevailing epidemic cholera, the young woman had diarrhoea, which continued three months, until the period of her accouchement, and weakened her considerably.

Accouchement.—The work of parturition took place on the 2nd November, 1849, two hundred and sixty-two days, or nine months, wanting eleven hours, after the marriage-day. I had claimed the right of putting her to bed, and, on being sent for, reached the patient at noon. The pains had come on at 5 o'clock in the morning. The day and night before had passed as usual.

On my arrival, the uterus, touching the bottom of the vagina, presented an opening of the size of a centimètre, from which a little amniotic liquid had escaped. The head, which I could distinguish, had descended into the cavity of the pelvis. The pains followed each other regularly every four or five minutes. Everything promised a favourable issue, and I trusted with confidence, though not altogether free from anxiety, in the resources of nature.

In an hour, the opening of the uterus (I dare not say the neck) being as large as a franc piece, I was able to introduce my finger, and discover a head presentation in the second position. The edges of the uterine orifice were firm and tense, though thin. I made incisions, with a bistoury passed on my finger in several places, but only on the sides, in order to keep clear of the rectum and bladder.

The dilatation did not become much more rapid. In three hours, it had attained the size of a two franc piece. The pains did not diminish in strength or frequency. I made two fresh incisions. These incisions were a little extended, like those which I had made at first, for by reason of the uterus wanting the neck and the lips (as I have shown above), and the vagina inserting itself circularly around the orifice, I feared extending my incisions, lest I should lacerate important parts. Nevertheless I found sufficient room to introduce my fingers into the uterus, and explore freely the cavity between its anterior wall, and the head of the foetus.

At five o'clock, the dilatation was of the size of a piece of six livres. The pains less intermittent and more continued, did little good. The young woman complained of great weakness, and began to lose courage. Since my arrival I had made her take broth several times, as she had eaten nothing since the preceding day. I now became uneasy, fearing that the mother had not sufficient strength to bring forth the child naturally.

At a quarter to six the patient complained of violent pain in the head, such as she had never before felt, and at the same moment fell into convulsions. The head was thrown back, with grinding of the teeth and jaws, loss of consciousness, pulse extremely small and rapid. Skin cold. I opened a vein in the arm and took about 2 oz. of blood. I sent for some mustard, and begged a physician, resident in the village, M. Regnault, to come and assist me. She came to herself in about three minutes and complained of oppression at the epigastrium, and violent pain in the head. I applied a mustard plaster to the pit of the stomach. In a quarter of an hour from the first fit, a second

(similar in every respect and of the same duration) took place. M. Regnault had arrived. The fit being over, I immediately applied the forceps to the head, which was scarcely engaged in the inferior outlet. The introduction of the forceps offered no difficulty. I fixed them rapidly, and fearing another fit, I terminated with some speed, but with sufficient deliberation to be most careful of parts so little prepared for the passage of the head of a child swollen with the forceps. The whole was, however, quickly accomplished.

The child was dead. I believe it must have perished during the convulsion, for the mother had felt it move several times during the labour. The after-birth came away almost of itself in about five minutes. It presented nothing remarkable. The mother was content with being delivered. She seemed astonished and rather incoherent in her ideas, but no more convulsions supervened, and in the evening all was going on well.

The child, a girl, weighed 2000 grammes. It had hair, nails formed, and every sign of a child born at the full time. It was warm, the skin was fresh, but the face was livid. The circumference of the head, measured by a tape, passing round the occiput and the frontal bones, 0 m. 33; the circumference, passing by the occiput and chin, gave 0 m. 36. It would have been interesting to have ascertained the condition of the vulva, the vagina, and the uterus, which might have had the same malformation as those of the mother, but I neglected to make the examination.

I have not indicated in my description of the labour, the state of the membranes, which I imagine were broken before my arrival.

I have also omitted to speak of the disposition of the pelvis in the mother. It appeared to me well developed in all its parts. I regret not having taken its dimensions.

On the day after the accouchement, November 3, I saw the patient early. She had slept pretty well, and had had neither delirium, stupor, nor head ache, but she still preserved a degree of astonishment. The uterus re-ascending to the umbilicus, was slightly painful on pressure. The rest of the abdomen was not so. The urine was retained, and I was obliged to use the catheter. I attentively examined the external parts. The labia were swollen. The perineum had sustained a laceration of about one inch, but a good inch remained intact before the anus. I introduced my finger into the rectum, and ascertained the complete integrity of the recto-vaginal septum. I applied a cataplasm to the abdomen, ordered a tisane of barley and dog-grass, and allowed broth three times a day.

Sunday, November 4. Sleep has been disturbed. The abdomen is painful in the region of the uterus, which still continues to ascend. The discharge by the vulva is diminished. The pulse quick, viz., 120. I had twenty leeches applied to the lower part of the abdomen, suspended the broth, and applied mustard to the thighs.

Monday 5. The patient has slept, and has no pain in the abdomen, excepting on pressure. The uterus has diminished in size, the lochia more abundant, the pulse 100. The moral condition is very good. The patient has passed her urine several times. Cataplasm of linseed to the abdomen; broth twice.

Tuesday, 6th. The patient has had five hours sleep, and passed water; pulse 90. Abdomen altogether free from pain, lochia rather abundant. The breasts are not yet swollen. Cataplasms; broth thrice.

Wednesday 7th. Condition better than on the preceding day. Pulse 80. The uterus has descended three fingers' breadth below the umbilicus. She has passed water, and had relief from the bowels. She asks for food. I allowed two very light potages and broth. Cataplasm to the abdomen. *I again ascertained by my finger in the rectum, and another in the vagina, that the recto-vaginal wall was intact.*

In the evening at ten o'clock she was seized with a violent fit of colic, without my being able to ascertain whether any imprudence had been committed. The woman who attended her said that she had given her her second potage, which was very light, at four o'clock, that she had slept towards the evening, and that at ten o'clock she awoke in great pain. The pains continued during the night, and, to my extreme regret, instead of sending for me, they patiently awaited my arrival on the following day.

Thursday 8th. I arrived at noon, trusting to the good condition of my patient on the day before. I found her face flushed, pulse full and tense, and at 135. The lochia were suppressed, the abdomen tense, distended, and everywhere painful. The uterus had re-ascended above the umbilicus. I was obliged to use the catheter to empty the bladder. The patient and the attendants assured me that there had been no chills. I dared not have recourse to bleeding, as the poor woman was too exhausted. I therefore ordered 20 leeches to the abdomen, but as they had to

be fetched from a distance they were not applied for three hours. In the evening, at half-past nine, I again saw the patient. She had rather less fever; pulse 130; the abdomen was rather less distended, and less painful on being touched. She no longer suffered pain. The leeches had drawn much blood. I covered the whole stomach with a layer of 30 grammes of mercurial ointment, and, above that, a poultice.

Friday 9th. A little sleep had been procured by an opiate. No chills. Fever continues high, pulse 138. Abdomen inflated, even to the epigastrium, and everywhere painful. The countenance is altered, respiration loud and hurried, lochia nearly suppressed, and the little which flowed of fetid odour.

Catheterism; introduced an emollient injection into the vagina and uterus, and after having spread 40 grammes of mercurial ointment on the abdomen, I covered it with a cataplasm. In the evening, excessive vomiting of a porraceous matter, in which a worm is found. I renewed the dressing.

Saturday 10th. The night has been very restless, but without delirium; no chills; porraceous vomiting; pulse 135, and more feeble; respiration very frequent; abdomen much the same; evening of the day she was weaker, pulse irregular and difficult to count.

She died in the night.

Thus terminated this long history, which occasioned me mingled satisfaction and distress, anxiety and hope,—a history which extended over two years, and which showed me alternately the resources and bounds of our noble art. If the young woman, for whom I had procured the happiness of being a mother, had been near me at the time of her accouchement, as she had promised me, perhaps my aid might have been more opportunely rendered, especially on the Thursday night, when they would not come two leagues to fetch me. The carelessness of country people is sometimes shocking, and then, as if their ignorance must injure others as well as themselves, their prejudices deprive one of the most legitimate mode of gaining correct information. The relations of this poor girl, whom I had attended with so much care, refused to allow me to open the body, in spite of my urgent request to be allowed to do so. If the reader laments at not having here the details of the *post-mortem*, I cannot otherwise console him than by expressing my own profound regret. — *Gazette Medicale de Paris*, January, 1851.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

The present return indicates some improvement in the public health. Under the influence of more favourable weather, the deaths, which in the first week of February were 1,109, have fallen to 1,036; and this tendency of the mortality to decline, is perceived both amongst young and old.

In the ten corresponding weeks of 1841–50, the average number of deaths was 1,050, which, if corrected for comparison with the mortality of last week, becomes 1,145. On this latter result, the 1,036 deaths of last week show a decrease of 109. However, an important difference is perceptible between the two classes of old and young persons, for, while nearly as many of the latter are now dying as usual for the period, the mortality of the aged has fallen considerably below the corrected average.

In the zymotic class of fatal diseases, small pox destroyed 26 lives; and in 8 of these cases the sufferers were between 15 and 50 years of age. On the 8th of February, at 16, Bishop's Mews, Paddington, a labourer, aged 47 years, who had never been vaccinated, died of confluent small-pox (after 12 days' illness); and on the following day, at No. 1, in the same mews, the wife of an ostler, aged 25, who had been vaccinated when a child, died of the disease 13 days after the eruption. A boy also died of small-pox at Church-place, in the same sub-district. Four deaths occurred on the 7th, 8th, and 12th of February, in the Small-pox Hospital at Holloway, at the several ages of 29, 32, 33, and 39. A woman, who was brought from Westbourne-place, and died of "small-pox confluent, unmodified (14 days' illness)," had been vaccinated young, and had "one very small cicatrix." An ostler, who came from Bartholomew-close, and a bricklayer from Islington, were not protected by vaccination; and a seaman from Sweden also died in the Hospital of "small-pox confluent, unmodified (12 days' illness)," though he had been vaccinated when young in his native country, and had three cicatrices. Out of the 26 fatal cases of this disease, it is only recorded in five that the patients had been previously vaccinated.

As regards other epidemics, measles carried off 29 children, scarlatina 19, hooping-cough 43, and croup 10, these complaints not differing materially from their several averages. Typhus numbers 43 victims, the majority being of middle age; whilst the average number in ten corresponding weeks was 37.

Complaints of the respiratory organs are now less fatal, and have

declined to near the average. Consumption, under which a greater number fall than any other malady, was fatal to 124 persons, of whom 105 had reached some period of life between 16 years and 60. The average of this disease, raised for increase of population, nearly equals 150.

The births of 821 boys and 755 girls, in all 1,576 children, were registered in the week. The average number in six corresponding weeks of 1845–50, was 1,373.

STATISTICS OF THE CHOLERA IN BERLIN.

The following details, taken from an authentic account of the various visitations of the cholera in Berlin, are perhaps likely to prove interesting to many of our readers:—

Years.	Number of Inhabitants.	Patients.	Proportion.	Recovered.	Died.
1831	229,843	2,274	9.8	851	1,423
1832	234,471	613	2.6	201	412
1837	265,394	3,557	13.4	1,219	2,338
1848	400,557	2,407	6.0	812	1,595
1849	404,600	5,361	13.0	1,809	3,552
1850	417,665	1,185	2.8	474	711

Total number of patients 15,397, of whom 5,366 recovered, and 10,031 died.—*Köln Zeitung*.

GLANDERS.

A horse-dealer at Toppisfield recently bought a glandered horse for a few shillings. As it was a good-looking animal, he endeavoured to sell it as sound, but fell a melancholy victim to his wickedness. Hastily wiping its nostrils as a customer appeared, some of the contaminated matter was absorbed by a scratch on his hand. The poison spread with wonderful rapidity, and he died in a few hours in great agony. He has left a widow and five children.—*Dumfries Paper*.

APOTHECARIES' HALL.

The following are the names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 13, 1851:—Charles Travers Mackin, Thomas Lewis.

OXFORD.

At the election last week for the living of Acton Round, in the gift, this turn, of the University, there was only one candidate—the Rev. G. W. Day, M.A., M.D., a medical practitioner, but in holy orders, of Trinity College, Dublin, who was duly elected.

OBITUARY.

At Panama, on the 9th of December last, at the Western Hotel, Thomas James Hammond, Esq., surgeon, son of the late Thomas Hammond, Esq., of Harwich.

NOTICES TO CORRESPONDENTS.

Communications have been received from—

DR. T. HERBERT BARKER, of Bedford.
WILLIAM ANSON CARTWRIGHT, Esq., Teignmouth.
DR. PATRICK BROWN, Leamington.
GEORGE VENABLES VERNON, Esq., Chorlton, Manchester.
CHARLES WILLCOX, Esq., Swanage.
CH. H. PARSONS, Esq., West Haddon.
GEORGE DRUMMOND, Esq., Brighton.
JAMES WILLIAM JEANS, Esq., Grantham.
S. ELLIOTT HOSKINS, Esq., M.D., Guernsey.
GEORGE JAMES SQUIBB, Esq., Orchard-street, Portman-square.
FRANCIS DAVIES, Esq., Pershore.
DR. LEE.
THEOPHILUS PROBE, Esq.
JAMES GLAISHER, Esq., F.R.S., Royal Observatory, Greenwich.
To all of whom the best thanks of the Editors are due.]

To the Editor of 'The Institute.'

SIR,—I had a patient very ill last week: I called in a consulting surgeon; he immediately took the case out of my hands, and now attends the patient alone. Is that etiquette? Would a gentleman have done so?

A GENERAL PRACTITIONER IN THE COUNTRY.

[Certainly not. Such men should be treated as common pickpockets.—Ed.]

METEOROLOGICAL TABLE FOR THE WEEK ENDING FEBRUARY 15, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Clusters of the Barometer above the Level of the Sea.	TEMPERATURE OF AIR.										MEAN TEMPERA- TURE OF		Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	Mean amount of Cloud, 0-10.	AUTHORITIES. AND NAMES OF OBSERVERS.										
				Range in the Tempe- rature of the Week.				Mean of all the		Mean Daily Range.	Mean.																					
				Highest.	Lowest.	Mean of all the Highest.	Mean of all the Lowest.																									
Jersey.....	49° 11'	2° 6' W.	75	in.	30.252	in.	30.144	in.	0.318	in.	0.259	56.0	°	35.0	°	51.4	°	38.0	°	13.4	°	44.9	°	42.5	39.5	°	0.62	gts.	0.831	551.2	5.6	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey	49° 33'	2° 40' W.	123	30.157	30.318	29.978	0.340	0.265	43.0	37.5	10.5	46.4	41.1	5.3	43.2	41.9	40.3	3.08	0.35	0.898	551.3	4.9	Dr. Hoskins, F.R.S., M.B.M.S.									
Turo	50° 17'	5° 4' W.	55	30.310	30.500	30.190	0.380	0.242	53.0	28.0	25.0	50.5	33.5	17.0	41.3	39.8	2.85	0.37	0.887	556.4	7.0	Dr. Sharpm.										
Exeter	50° 45'	3° 41' W.	140	30.131	30.380	29.990	0.400	0.239	50.0	26.2	23.8	47.7	29.4	18.3	39.2	38.4	2.80	0.21	0.901	554.6	4.0	Dr. Bapheim, M.B.M.S.										
Southampton.....	50° 54'	1° 24' W.	55	30.188	30.354	29.977	0.377	0.237	50.2	30.0	20.2	46.8	34.2	12.6	39.4	38.4	2.78	0.25	0.917	556.4	6.0	J. Drew, Esq., F.R.A.S., M.B.M.S.										
Uckfield.....	50° 59'	0° 5' E.	180	30.050	30.385	30.055	0.330	0.225	49.0	27.0	22.0	45.8	32.6	13.2	36.1	37.0	2.64	0.26	0.900	555.4	8.0	C. L. Prince, Esq., M.R.C.S., M.B.M.S.										
Greenwich.....	51° 03'	0° 7' W.	160	30.130	30.311	29.984	0.497	0.230	45.5	27.6	20.9	46.8	34.4	11.4	39.6	38.1	2.70	0.36	0.898	555.1	7.0	From Reg-Gen. Report.										
Lewisham	51° 28'	0° 1'	78	30.215	30.450	30.044	0.406	0.237	49.7	28.0	21.7	46.4	34.3	12.1	39.4	38.4	2.78	0.35	0.917	557.0	7.0	H. Gordon, Esq.										
St. John's Wood	51° 32'	0° 1' W.	150	30.135	30.354	29.938	0.416	0.227	47.5	29.5	18.0	44.8	33.0	11.8	37.9	37.0	2.67	0.22	0.925	557.1	7.3	G. Leach, Esq., F.Z.S., M.B.M.S.										
Hartwell	51° 43'	0° 51' W.	250	29.981	30.212	29.700	0.422	0.246	50.0	28.0	20.2	47.5	33.1	14.4	39.2	38.7	2.75	0.14	0.950	552.7	6.7	Dr. Lee, F.R.S., Treas. B.M.S.										
Cardington	52° 7'	0° 25' W.	100	30.157	30.390	29.982	0.408	0.239	49.2	30.8	18.4	45.6	33.5	12.1	39.2	38.3	2.75	0.21	0.932	556.6	7.0	S.C. Whitbread Esq., F.R.A.S., Pres. B.M.S.										
Norwich	52° 37'	1° 16' E.	39	30.264	30.480	30.190	0.367	0.230	47.0	31.0	16.0	45.2	34.8	10.4	39.9	38.5	2.68	0.39	0.872	557.3	8.1	W. Brooke, Esq., F.R.A.S., M.B.M.S.										
Nottingham	52° 55'	1° 10' W.	203	30.091	30.320	29.923	0.397	0.223	49.0	29.0	20.0	45.3	33.7	11.6	39.4	37.7	2.61	0.42	0.866	554.5	6.7	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.										
Haverdon	53°	3° 0' E.	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Dr. Moffatt, F.R.A.S., M.B.M.S.		
Liverpool	53° 25'	3° 0' W.	37	30.238	30.455	30.072	0.393	0.200	50.5	39.6	10.9	47.2	41.6	5.6	43.3	41.7	39.3	3.02	0.42	0.876	552.9	7.3	John Hartmum, Esq., F.R.A.S.									
Manchester	53° 29'	2° 16' W.	144	30.160	30.392	30.002	0.390	0.250	49.5	32.0	17.5	46.2	37.1	9.1	40.9	39.9	38.5	2.93	0.25	0.925	554.0	9.6	G. V. Vernon, Esq., M.B.M.S.									
Wakefield	53° 41'	1° 30' W.	115	30.122	30.352	29.966	0.386	0.224	51.5	27.5	24.0	48.2	33.4	14.8	40.5	38.8	36.3	2.70	0.44	0.873	553.8	9.2	W. R. Milner, Esq., M.B.M.S.									
Stonyhurst	53° 31'	2° 28' W.	381	29.818	30.032	29.663	0.369	0.246	49.3	28.1	12.2	46.2	35.1	11.1	40.9	39.7	37.9	2.83	0.30	0.911	547.8	9.0	Rev. A. Weld, F.R.A.S., M.B.M.S.									
Whitehaven	54° 33'	3° 25' W.	90	30.068	30.370	29.954	0.416	0.280	47.0	35.0	12.0	46.1	40.6	5.5	42.7	42.3	41.8	3.26	0.11	0.968	550.8	—	J. F. Miller, Esq., F.R.S., M.B.M.S.									
Glasgow	55° 51'	4° 15' W.	121	30.027	30.286	29.966	0.320	0.254	52.0	32.7	19.3	47.7	38.3	9.4	43.1	38.9	2.95	0.46	0.860	548.2	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.										
Dunino	56° 16'	2° 49' W.	250	29.783	30.000	29.790	0.270	0.241	51.0	31.0	20.0	45.9	35.4	10.5	40.5	38.2	37.4	2.82	0.32	0.900	547.4	3.0	David Inmant, Esq., M.B.M.S.									

The highest readings of the thermometer in air were 59° at Jersey, 53° at Truro, and 52° at Glasgow. The readings were 62° at Exeter, 27° at Greenwich. The least daily ranges of temperature took place at Guernsey, 5·3°; at Whitehaven, 5°; and at Liverpool, 5·6°; their mean value is 5°; and the greatest occurred at Exeter, 18·3°; at Truro, 17°, and at Wakefield, 14·8°; and their mean value is 16·7°. The fall of rain was small at all places. The next table contains the average meteorological particulars for different parallels of latitude:-

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Read- ings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Temperature.	Mean of all the Highest Readings of the Ther- mometer.	Mean of all the Lowest Readings of the Ther- mometer.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Hu- midity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.	
																		General Direction.	Average Strength.	Average number of days it fell.	Average fall.		
Truro and Exeter	98	50.31	30.221	in.	51.5	27.1	24.4	49.1	31.5	17.6	40.1	39.1	37.4	58.3	67.	0.894	555.5	RTS.	NW. & SW.	0.1	2	0.14	5.5
Southampton to Hartwell ...	146	51.22	30.117	0.234	49.2	28.4	20.8	46.2	33.6	13.6	38.9	37.9	36.3	27.2	0.29	0.919	556.6	NE. & SW.	0.2	2	0.04	7.0	
Cardington to Nottingham ...	114	52.34	30.181	0.231	48.4	30.3	18.1	45.4	34.0	11.4	39.5	38.1	38.1	2.70	0.20	0.890	556.1	SW.	0.2	1	0.02	7.3	
Manchester to Stonyhurst.....	213	53.34	30.093	0.240	50.1	29.2	30.9	46.9	35.2	11.9	41.4	40.3	38.7	2.95	0.28	0.917	550.8	E. & SW.	0.1	2	0.15	9.1	
Liverpool and Whitehaven ...	64	53.59	30.168	0.270	48.8	37.3	11.5	46.7	41.1	5.6	43.0	42.0	40.6	3.14	0.27	0.922	551.9	SE. & SW.	0.2	2	0.17	7.3	
Glasgow and Dunino	186	56.4	29.905	0.247	51.5	31.9	19.6	46.8	36.8	10.0	41.8	40.2	38.2	2.58	0.39	0.889	548.3	SE. & SW.	0.1	2	0.06	0.0	

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

At JERSEY, this has been a remarkably fine and serene week, with light airs generally from the eastward; the 14th was foggy in the middle of the day. Thermometer on the grass was at 29 deg. on the 11th; 27 deg. on the 12th; 30.5 deg. on the 13th, and 30 deg. on the 15th.

At GUERNSEY, the 9th, sunshine, light breeze; the 10th, clouds and sunshine A.M., and partially overcast P.M.; the 11th, sunshine and clouds, calm, a heavy dew; the 12th, hoar frost and clear A.M.; clouds and sunshine P.M.; the 13th, partially overcast and calm A.M.; sea haze, clouds, sunshine, clear P.M.; the 14th and 15th fine.

At TRURO, the 9th, A.M., frost (hoar), very fine day, light breeze; cirro-cum. at sunset; night fine, some long streamers of cirrus from S. to W.; the 10th, A.M., frost (hoar) cirro-cum., fine day, but overcast, with small cumuli; towards sunset cleared, with cirro-cum. in W.; night cloudy, still; the 11th, A.M. fine, cirro-cum., clouds passing from S.E., sun shone in middle of day, otherwise cloudy; evening and night fair, mist in valleys; the 12th, A.M., early mist, very fine day, cirrus P.M. not extensive; night fair, rather misty; the 13th, A.M., fair, cloudy, still; P.M. fine (cirrus); night fine, still; the 14th, A.M., early fine, a few drops of rain about ten, massy nimbi but redissolved; P.M. fine; towards morning showery; and the 15th, A.M. early showery; mid-day fine; about 4 P.M. sky was overcast with massy nimbi, and some drops of rain fell, but the vapour was soon dispersed; night clear, frosty.

The days and nights of this week have generally been clear and fine. The mornings somewhat misty till 10 A.M. Ice was seen on the 9th, 11th, and 15th.

At SOUTHAMPTON, the 9th, 11th, 12th, 14th and 15th days were fine; the 10th was dull; there was a halo around the moon on the 12th; and there were swarms of gnats on Southampton Common on the 11th and 14th.

At UCKFIELD the mornings of the 9th and 10th were gloomy; the days were overcast. The morning of the 11th was gloomy; the day was very fine after 10 A.M.; a lunar halo at night. Hoar frost on the 12th, which was a fine day; overcast night. The sky on the 13th was overcast. There was a dense fog till noon on the 14th; fine afternoon; a lunar halo at night; and the 15th was a very fine day. *Leontodon taraxacum*, and *Ulex Europæus*, have flowered during the week.

At LEWISHAM the sky was mostly overcast on the 9th, 10th, 11th, 12th, 13th, and 14th, and the 15th was cloudless. During the afternoon of the 13th a great darkness prevailed.

At ST. JOHN'S WOOD; on the 13th, the darkness in London was very great all day, but at about 2 P.M. all gas was obliged to be lighted, when it had all the appearance of night; the extreme darkness here did not commence till near 4, but by the time I reached home it became somewhat lighter, but was obliged to use the lamp to take the reading of the instrument out of doors at 5 P.M. 15th, from 8 to 12 noon, fog, so dense that objects at the distance of twenty yards were not visible.

At HARTWELL there was a sharp white frost on the morning of the 9th; a fine day; overcast night. On the 10th a small quantity of snow fell between the hours of 1 and 2 P.M. 11th was fine, with frost at night. The 12th was fine; frost in the morning. The 13th was overcast. The 14th was dull till noon, and fine afterwards, and the 15th was fine. Vegetation is progressing rapidly. The wheat and winter beans are looking very healthy.

DAILY DIRECTION OF THE WIND AND FALL OF RAIN:—

Names of Stations.	FEBRUARY.							RAIN.	
	9	10	11	12	13	14	15	Fall in the week	No. of days it fell from Jan. 1.
Jersey	N.N.E.	N.N.E.	S.E.	E.	N.W.	E.	S.E.	in.	4.2
Guernsey	N.W.	N.E.	N.E.	S.E.	W.	S.E.	N.E.	0.00	4.7
Truro .....	...	...	...	S.W.	...	S.E.	S.S.E.	0.08	10.94
Exeter	N.W.	S.E.	N.W.	N.W.	S.W.	S.W.	S.E.	0.20	7.23
Southampton ...	...	N.	S.	S.E.	...	...	S.E.	0.04	6.67
Uckfield	N.W.	N.E.	E.	W.	W.	N.W.	E.	0.00	5.33
Greenwich	N.	N.	S.S.W.	S.S.W.	W.	E.S.E.	...	0.06	3.40
Lewisham	N.N.W.	E.N.E.	E.S.E.	W.S.W.	W.	E.S.E.	S.S.E.	0.10	3.50
St. John's Wood ..	N.	N.E.	S.W.	...	E.	E.N.E.	S.W.	0.02	4.11
Hartwell	S.W.	S.E.	S.	S.W.	S.W.	N.W.	S.W.	0.00	3.19
Cardington	N.W.	N.E.	S.W.	W.S.W.	W.S.W.	S.	S.S.W.	0.03	2.49
Norwich .....	...	N.E.	S.W.	S.W.	N.E.	S.	S.W.	0.03	3.05
Nottingham	S.W.E.	S.W.	S.W.	S.W.	E.	S.S.W.	S.W.	0.00	2.48
Hawarden .....	...	...	...	...	...	...	...	...	...
Liverpool	N.N.W.	S.E.	S.E.	S.S.W.	S.E.	S.E.	S.S.E.	0.00	4.18
Manchester	W.	S.E.	S.W.	W.	E.	E.	S.	0.15	..
Wakefield	W.S.W.	S.S.W.	W.S.W.	W.	S.E.	S.	S.W.	0.14	2.22
Stonyhurst	S.S.E.	S.	S.S.W.	W.S.W.	E.	S.S.W.	S.S.W.	0.15	8.84
Whitehaven	S.W.	S.W.	S.	S.	S.W.	S.W.	S.W.	0.34	12.64
Glasgow	E.S.E.	S.	S.W.	W.S.W.	E.N.E.	W.N.W.	W.S.W.	0.10	8.31
Dunino .....	...	0.01	0.02	...	0.07	...	...	0.02	4.31

The fall of rain at all places has been small; at some of the places where none is recorded, a drizzling rain has at times fallen, though not in sufficient amount to affect the reading of the gauge.

At CARDINGTON, on the 9th, hoar frost; sunshine. The 10th, dull and cloudy. The 11th and 12th, alternately cloudy and sunshine; fine. The 13th and 14th were foggy. The 15th very foggy; morning bright; sunshine afternoon; bright and starry night, with a white frost, and a low mist on the ground. The lowest reading of a minimum thermometer on grass in the week was 15.5 deg. on the night of the 15th. A maximum thermometer placed in the full rays of the sun on grass was 72.0 deg. on the 9th. Lunar halos were seen on the nights of the 9th and 14th. Thrushes and blackbirds have been singing some time. Crows have commenced building. Crocuses are beginning to flower. The first blossoms expanded on apricot trees.

At NORWICH, the 10th, the whole day clouded. The 11th, fog in the morning; the remainder of the day overcast. The 12th, fog in the morning; overcast the rest of the day. The 13th, fog in the morning; forenoon overcast; light rain at night. The 14th overcast the whole day; and the 15th, fog in the morning; forenoon fair; afternoon the same; thick fog at night.

At HIGHFIELD HOUSE, the 9th, white frost; cirri converging towards N.; fine day; few cumuli; wind changed to E. at 1 P.M. The 10th, white frost; stratus in valley; fine. The 11th, overcast, but fine. In London, at noon, a solar halo. The 12th, fine, (few drops of rain); cumuli. In London, at 1 P.M., solar halo. The 13th, misty morning; fine day. The 14th, overcast, but fine. The 15th, fine sunshine; at night heavy white stratus in valley; white frost; cloudless.

At LIVERPOOL, on the 9th, cirro-cumulus and haze throughout the day. The 10th, haze and fog. The 11th, A.M., haze and fog; P.M., overcast. The 12th, A.M., overcast; P.M., hazy. The 13th, A.M., cirrus and haze; P.M., haze and scud; a few drops of rain in the evening. The 14th, A.M., cirro-cumulus and haze; P.M., hazy; evening clear. Lunar halo at 7 h. of 70 deg. diameter; at 9 h. it was still visible, but the diameter had diminished to 25 deg. The 15th, A.M., cirrus and haze; P.M., overcast; occasional patches of blue sky in the evening.

At MANCHESTER, till the 13th, the sky was chiefly overcast, and the weather was gloomy, and the 14th and 15th were fine.

At STONYHURST, on the 9th, morning frost; very fine and mild. 10th, red cirrus at sunrise, fine and mild all day; rather foggy in the evening. 11th, morning very mild and pleasant; cloudy; slight drizzle about noon; afternoon fair. 12th, fair and very mild all day; generally cloudy. 13th, Damp and cold; slight drizzle in the morning and great part of the afternoon. 14th, very fine and mild; clouds prevalent. 15th, very fine cloudless morning; afternoon overcast; very mild all day. Many bushes and shrubs are already coming into leaf; the *laurostinus* has been in flower all the winter; the common wall-flower, *polyanthus*, primrose, are in full flower. I have also seen the common hepatica and a variety of the *erica*, in bloom. I have also seen a branch of oak, the leaves of which had remained perfectly fresh and green all the winter.

At WHITEHAVEN, a week of damp and gloomy weather.

At DUNINO, the 9th and 10th were mild; the 11th was fine; a little drizzling rain fell in the evening; the 12th was chiefly clear; the 13th, 14th, and 15th were fine. The season is early, there has not been either hail or snow, or anything like winter weather.

At JERSEY, a good deal of illness still about, influenza and diarrhoea, but I have heard of nothing formidable.

At GUERNSEY, scarlatina still prevalent but mild; measles recurring.

At TRURO, the town and neighbourhood are generally healthy. Catarrhs, usually mild, but commencing suddenly, have occurred in many instances within the last few days, especially among children. Toothache and neuralgic pains have been likewise common.

At EXETER, tendency to catarrhal affection, but not to any very great extent. At UCKFIELD, influenza, scarlatina, whooping-cough, and typhus are prevalent.

At ST. JOHN'S WOOD, the prevalent disorders of the week are scarlet fever whooping-cough, rheumatism, and bronchitis; the latter somewhat less than last week, but influenza rather on the increase. No fresh cases of small-pox or measles; acute inflammatory affections less, but diarrhoea rather increased.—J. H. ROBERTS.

At BEDFORD, a few cases of rheumatism, catarrh, and neuralgia only.

At NORWICH, the type of disease is somewhat modified this week, but influenza and catarrhal affections are the principal at this time.

At HIGHFIELD HOUSE, NEAR NOTTINGHAM, whooping-cough on the decrease, and the neighbourhood healthy.

MANCHESTER, four deaths from fever, one scarlatina, two from measles; Hulme, one death from measles; Ardwick, two deaths from fever; Salford, one death from fever, three from small-pox. In the week ending February 11th, at Manchester, there were 116 deaths, and 136 births; Chorlton upon Medlock, 15 deaths, and 30 births; Hulme, 31 deaths, and 41 births; Ardwick, 7 deaths, and 9 births; Cheetham, 4 births; Salford, 39 deaths, and 82 births.

At WAKEFIELD, there has been a marked increase of influenza and rheumatism, but no other diseases have prevailed to any great extent.

At DUNINO, this district is at present extremely healthy.

The weather during the past week has been mostly fine, but not universally so. At some places it has been gloomy and dull, the air has been in very little motion, the fall of rain has been small; the changes of pressure have been very small, and the reading of the barometer has been high, at the level of the sea it has exceeded 30 in. every day, and it has been almost always equally distributed. The temperature of the air has been different; at 9 A.M., on the 9th, it was about 35 deg. in latitude 51½ deg., and it was 50.6 deg. at Jersey, and about 40 deg. at Glasgow. On the 10th it was 45 deg. at Jersey and in extreme north, whilst it was less than 40 deg. in the centre of England. On the 11th the highest temperature, 46.8 deg., was at Glasgow and Dunino, the lowest was in latitude 51½ deg., and was 32 deg., which increased to 38.6 deg. at Jersey. On the 12th the lowest temperatures were between the latitudes of 50½ deg. and 52 deg.; the highest was 48.7 deg., at Jersey. On the 13th the lowest temperature was 33 deg. at Dunino, and the highest was 44 deg. at Jersey. On the 14th the lowest temperature, 37 deg., was about latitude 52 deg., and the highest, 47 deg., was at Jersey. And on the 15th the lowest temperature was about 30 deg., and occurred between the latitudes of 51½ deg. and 52 deg.; and the highest was at Glasgow, 44 deg., the next highest was at Jersey, and was 43.2 deg. The band of cold throughout the week seems to have been confined to places situated between the latitudes of 51 deg. and 52 deg.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

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1st. To create a higher tone in the public mind towards the Medical Profession, without compromising its honour, standing, or liberal character, and to secure the more regular payment for professional services from that large class of Society who possess the means, but not the disposition, to remunerate Medical Men.

2nd. To establish a Fund, to be devoted to the erection and support of a College for the Education of the Children, Orphans, or otherwise of Medical Men, and also for the reception of Distressed Members of the Medical Profession or their widows.

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No unqualified person can be admitted a Member of this Society.

The Trustees and Committee are responsible for all moneys paid to the Society, and also for the integrity of their Agents.

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The following statement shows the progress of the Institution from its commencement:—

Years ending	No. of Policies issued.	Annual Income.	Amount of Capital.
20th Nov., 1836	616	£ 8,021 12 2	£10,736 3 0
" 1837	435	14,600 0 0	31,592 10 5
" 1838	459	19,934 19 4	46,855 0 10
" 1839	490	25,457 4 2	64,959 10 10
" 1840	494	31,091 10 10	90,545 13 9
" 1841	357	36,367 1 4	114,993 2 4
" 1842	364	39,360 9 7	139,806 1 7
" 1843	703	44,219 17 0	167,079 11 2
" 1844	722	55,037 9 2	202,162 1 0
" 1845	911	70,819 14 5	241,460 13 3
" 1846	1005	88,940 8 2	299,675 12 4
" 1847	1234	111,113 13 0	367,172 16 0
" 1848	1423	126,232 7 6	440,028 15 3
" 1849	1736	151,976 4 7	517,243 7 1
" 1850	1549	172,500 16 9	628,869 14 7
Total number	12,498		

Copies of the Report presented to the Members at the Fifteenth Annual Meeting, held at the London Tavern, on the 16th ultimo, may be had on application at the office.

The next Quinquennial Division of Profits will be made up to the 20th November, 1852.

January 10, 1851.

JOSEPH MARSH, Secretary.

DIVISION OF PROFITS.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 9.

LONDON, SATURDAY, MARCH 1, 1851.

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DELIVERED AT

THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

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LECTURE IX.

PIKROPEGÆ.—CARLSBAD.

GENTLEMEN,—The neighbourhood of the spa treated of in our last lecture, leads us to the consideration of another class of mineral waters, viz., to that of the Pikropegæ (bitter spring), from *πικρος*, bitter, and *πύγη*, spring), characterized by the predominance of sulphate of magnesia, or of soda, which imparts to them a bitterish and sometimes a nauseous taste. The abundance of free carbonic acid removes the mawkishness or nausea of some, whilst heat modifies the flavour in others. Generally they are transparent and colourless; small quantities of atmospheric air or carbonic acid are found in most of them, rarely traces of sulphuretted hydrogen.

They are called *pikrothermæ*, if warm or hot (from *πικρος*, bitter, and *θερμος*, hot), and then possess a taste analogous to chicken broth, like the weaker *halothermæ*; and *pikrokrenæ*, if cold (from *πικρος*, bitter, and *κρήνη*, adopted as the appellation for cold springs). The alkaline bitter waters display a less bitter and mawkish taste than the earthy, particularly if impregnated with a sufficient amount of free carbonic acid; for instance, Franzensbad. Contact with organic substances, pieces of straw, &c., whilst the bottles are filling, easily produces decomposition and evolution of sulphuretted hydrogen gas.

The pikropegæ originate in volcanic mountains, or in strata of marl, sometimes in secondary layers of gypsum, where the lixiviation of the sulphate of lime has altered the conditions which would otherwise favour the production of saline springs.

Their general effect consists in depression of the organic vitality, and they are, therefore, indicated in cases of general irritability, with obstructed abdominal circulation. Of course admixture of iron, or other metals, modifies this result to a considerable degree.

Co-existence of carbonate of soda in the same spring, causes a very powerful combined alterative action on sanguification. From its vicinity to Teplitz, our next visit is claimed by Bilin, which we may inspect before reaching the pikropegæ. It is a little town, of nearly 3,000 inhabitants, situated on the river Bila, which meanders through the Middel-mountain, and then enters the Elbe near Aussig. Gneiss forms the foundation of the mountain masses, superposed by stratified trap rock, consisting of klingstone, porphyry, and basalt. The Biliner Stein or Borcen to the south, affords a very extensive and agreeable perspective. The springs are situated about half a league from the town, at the eastern declivity of the Ganghof. In wandering through the shady walk which leads to the sources, you pass on your left the laboratory, in which magnesia is prepared in large quantities from the chemical interchange between the sulphate of magnesia of Saisdchütz, and the carbonate of soda of the Bilin spring. The soda of the concentrated Bilin water combining with the sulphuric acid of that of Saisdchütz for the formation of sulphate of soda, carbonate of magnesia separates, and yields a large income to the princely proprietor (Prince of Lobkowitz). Behind the Arhaus, on the right, you descend by stone-steps to the chief source, Josephsquelle; the water is clear and sparkling, with an agreeable pricking taste; temperature, 9° Reaumur (52° Fahrenheit), specific gravity, 1.006. In the abundance of carbonate of soda, it surpasses all German springs, (Vichy, in France, alone possesses a larger quantity). Analysis, according to Struve, shows it to possess 38 grains of solid constituents in 16 ounces, viz.:—

Comparison with Teplitz.

22.73 gr. of carbonate of soda	...	2.68
3.06 " " " lime	...	0.49
1.19 " " " magnesia	...	0.28
6.17 sulphate of soda	...	0.54
2.88 chloride of sodium	...	0.42
Shows a great analogy between the two as regards quality.		
1.73 sulphate of potash	...	0.43
0.02 basic phosphate of alumina	...	0.02
0.35 silex	...	0.31
Traces of strontia and iron,	{ carb. ir. 0.03	
	{ strontia 0.01	
Carbonic acid 3½ cubic in.		

The water is more drunk at other places than at its source,

upwards of 90,000 bottles being annually exported. The other springs—Carolinenquelle, Quelle im Gewölbe (spring in the vault), and Gemeinquelle (common spring), are very similar. Compared with Selter water it has the advantage of possessing 16 grains more of carbonate of soda, but the latter from its greater quantity of chloride of sodium (17 grains in 16 ounces) has a more agreeable taste, and deserves the preference whenever the properties of the latter salt are more called into requisition.

Fachingen water offers a great resemblance to Bilin, having only 5 grains less of carbonate of soda, and about two more of common salt.

Geilnau, which is also frequently used as an alkaline water, contains only 11½ grains of solid constituents, and of these only 6 are carbonate of soda, 2 carbonate of magnesia, and 2 of lime. Heppingen contains the same quantity of carbonate of soda, of magnesia, and of lime, but has in addition 3 grains of common salt and 2 of soda (altogether 15 grains), and thus its efficacy holds an intermediate position between Fachingen and Geilnau.

Without further dwelling on the medical properties of Bilin, which are those of carbonate of soda, referred to in the last lecture, we pursue our course to the south and inspect Saisdchütz, situated two leagues to the south-east of Bilin, in the eastern part of the plain of the bitter waters. Deep ditches are dug into the marl, composed of basalt, quartz sand, and carbonate of lime. These gradually fill with atmospheric water, and get impregnated with the soluble parts of their earthy beds. The drier the season, the more concentrated will be their contents.

Before being medicinally employed, these nauseous waters were known in the neighbourhood under the denomination of "Laxir, Fress, or Fieberwasser" (purging, appetite making, or fever water).

Saisdchütz, enjoying a higher situation, is less exposed to the influx of meteoric water than its westerly neighbour, Seidlitz; and thus its greater abundance of solid ingredients is accounted for. The ridge, gently sinking from Krssina to the Serpina bog, encloses the limited locality of these bitter springs. Saisdchütz contains in 16 ounces 178 grains (nearly 3 drachms), viz.:

46½	grs. of sulphate of soda,
84	" sulphate of magnesia,
10	" sulphate of lime,
2	" chloride of magnesium,
5	" carbonate of magnesia,
1	" crenate of magnesia,
25	" nitrate of magnesia,
3-100	" iodide of magnesium.

You have then sulphate of magnesia as the chief ingredient, with about half the quantity of sulphate of soda and nearly a third of nitrate of magnesia. Its property as a solvent, aperient, cooling, and antiphlogistic remedy is too obvious from this composition to require any further explanation. Saisdchütz salt is prepared by concentration, crystallisation, and separation of the sulphate of magnesia, by means of its greater solubility. It is obtained in the pharmacies under the name of bitter-salt, or more commonly under that of "Englisches Salz" (English salt). Seidlitz, about half-an-hour's walk to the north-west of Saisdchütz, contains only 126 grains of solid ingredients in 16 ounces (nearly a drachm less than Saisdchütz), viz., no sulphate of soda; 104 grains of sulphate of magnesia (a scruple more than Saisdchütz); 8 grains of sulphate of lime (2 less than Saisdchütz); 3 grains of chloride of magnesium (1 more than Saisdchütz); 3 grains of carbonate of magnesia (2 less than Saisdchütz); 8 grains of carbonate of lime (none contained in Saisdchütz); no silex; no nitrate of magnesia.

Analogous to the composition of Saisdchütz, it exerts a less aperient power, its smaller quantity of sulphates being also partially counteracted by the presence of carbonate of lime. The absence of the antiplastic nitrate renders it a still weaker agent in counteracting congestive fullness of internal organs. The real Seidlitz powder, which I have prepared for this lecture, by evaporation, you will find vastly different from the pleasant and refreshing Seidlitz powder sold in commerce, with the alkali in white and the acid in blue paper, and consisting of triple tartrate of potash and soda.

Püllna, the furthest to the west, lies on the road to Carlsbad, and possesses several enclosed wells; only one, however, is used, being of such abundance, that 6,000 small bottles might be filled weekly with it. The three waters are remarkable for their disagreeably bitter taste and their yellowish tint. When drawn, they are clear and transparent. Drunk at the springs, the nausea is partially diminished through the somewhat greater proportion of carbonic acid. When used at a distance, I always find the effect increased, and the assimilation of the water facilitated, by adding an equal quantity of hot water to that medicinally required

Püllna contains in 16 ounces, 251 grains (more than half an ounce and nearly 4 scruples more than Saldschütz); viz., 123 grains of sulphate of soda (about 4 scruples more than Saldschütz); 93 grains of sulphate of magnesia (9 grains more than Saldschütz, and 11 less than Seidlitz); $4\frac{1}{2}$ grains of sulphate of potash (none contained in Saldschütz or Seidlitz); $2\frac{1}{2}$ grains of sulphate of lime (8 grains less than in Saldschütz); $19\frac{1}{2}$ grains of chloride of magnesia (only 2 in Saldschütz and 3 in Seidlitz); $6\frac{1}{2}$ grains of carbonate of magnesia (only 5 in Saldschütz and 3 in Seidlitz); $\frac{3}{4}$ grain of carbonate of lime (none in Saldschütz, 8 in Seidlitz); 17-100ths grain of silex (3-100ths in Saldschütz, none in Seidlitz); no nitrate of magnesia; no iodide of magnesia. This constitution at once informs you of its greater power as a solvent, derivative, and aperient, than the two former.

Before leaving the subject of the bitter waters, which are rather to be classed as medical beverages than as mineral springs, allow me to bring to your notice a fourth, also frequently employed in analogous cases, though its origin lies some distance from the spot which we are treating of at present. I allude to the *saline bitter water of Friedrichshall*, in the dukedom of Saxen-Meiningen, near the village of Lindenau, four leagues distant from Coburg, five from Hildburghausen, and nine from Bamberg. The place has been noted for its salt-works, for several centuries. Glauber-salt was obtained from the brine, under the appellation of *salapetrivum Fridericianum*. Dr. Bartenstein, of Hildburghausen, has caused the water to be employed since 1843. To approximate its strength to that of Püllna, it is concentrated by graduating works and filtering processes, and not exported till its specific gravity amounts to 1,022, at 10° Reaumur; the water is clear and transparent, and contains in 16 ounces, $194\frac{1}{2}$ grains of solid constituents (nearly a drachm less than Püllna, and a scruple more than Saldschütz), viz., $46\frac{1}{2}$ grs. of sulphate of soda (the same amount as Saldschütz, and about 4 scruples less than Püllna), $39\frac{1}{2}$ sulphate of magnesia (only half the amount of that which is in Saldschütz, and nearly a drachm less than in Püllna), $1\frac{1}{2}$ sulphate of potash (the third of the quantity which is present in Püllna), $10\frac{1}{2}$ of sulphate of lime (same amount as in Saldschütz, and four times as much as is to be found in Püllna), $30\frac{1}{2}$ chloride of magnesium, (half a scruple more than Püllna), 3 1-10th carbonate of magnesia (Püllna possesses double the quantity), 1-10th carbonate of lime.

Besides the above, bearing analogy to the Bohemian bitter waters, it contains 8-10ths bromide of magnesia, 61 1-10th grains of chloride of sodium, and 5 cubic inches of carbonic acid.

If, then, the bitter waters are generally useful in indigestion, in deficient alvine secretions, in abnormal bilification, obstruction and torpor of the alimentary canal, in plethora and venous dyscrasia, thoracic or cerebral congestion, Dr. Bartenstein considers the water of Friedrichshall, from its chlorides, particularly appropriate in various diseases of nutrition, where Püllna would exert a too lowering influence. He found it very useful in dyspepsia, even connected with inflammatory irritation of the stomach, when taken in small doses of two to three wine-glasses full, at shorter or longer intervals; in erethistic gastrodynia, &c. Even in pyloric induration he saw vomiting diminished by the water taken in doses of a tablespoonful. He also recommends it in flatulence, acidity, and the spasms of childhood, arising from irritation during difficult dentition, in mucosity of the pulmonary mucous membrane, and in hysteria and hypochondria, based on abdominal obstructions; in chronic swellings of the spleen he observed rapid cures by a course of the water in small quantities; also in hepatic hypertrophy, after a long continued intermittent fever. For the habitual venesections of many persons, to counteract apoplectic tendency, the water may be safely substituted. He considers it as holding an intermediate position between the bitter and more tonic saline waters. I have had no opportunity of testing its efficacy, it having only very recently been introduced here, but its composition is such that appropriate cases must frequently occur, where its employment promises useful results. Its happy combination of chloride of sodium, of magnesium, and bromine, with the sulphates of soda and magnesia, allows us to expect a combined solvent, alterative, and aperient efficacy.

Carlsbad.—But let us proceed on our journey. If you desire to travel uninterruptedly from Teplitz to Carlsbad, you may leave at 8 p.m. by the eilwagen, and in thirteen hours (9 next morning) you will reach the so-called king of the German spas. Carlsbad is situated latitude 50, longitude east 13, in the Elbnogner Kreis of Bohemia, on both sides the Tepl river, in a narrow deep valley, which extends from south to north, at an elevation of 1,100 feet above the level of the North Sea, 80 miles to the west of Prague, 100 to the south-west of Dresden, 65 miles to the south-west of

one") originate in the south above Marienbad, about 50 latitude, and entering the Eger river in the north. Carlsbad, a charming little town of 3,000 inhabitants, allows free access to the north winds, as you will perceive from its situation; the temperature is therefore often exposed to sudden changes, though the climate is generally temperate. You also see the valley devoid of mountainous enclosure in the west. The discovery of the spa is ascribed to a dog of the Emperor Charles IV., who, about four and a half centuries ago, when in pursuit of a stag, leaped into a spring, and attracted the huntsmen by its painful howlings. When they arrived, they found him in the hot spring, now called "Sprudel" (Bubbler), because its steaming liquid constantly rises and falls with a hissing noise. The spot from which that famous leap is said to have taken place, assumed the name of "Hirschen-sprung" (stag's leap) to the west of the town.

To the south, you remark the Hammerberg; to the north-east, the Kreuzberg, on the other side of the Tepl. These are the highest mountains. The Laurenz Mountain, or Tappen, to the east, and Galgen Mountain, to the north, are somewhat lower. The rocks consist chiefly of granite. The Schlossberg, leaning on the Hirschenstein, is composed of horn-stone. Immense masses of volcanic origin reach from Schlackenwerth to Engel-wall. About a quarter of a league below Carlsbad, the valley widens and allows the Tepl to pour its contents into the Eger river.* The road to Carlsbad from the height (if coming from Prague) makes a sombre and yet a grand impression, when you descend such a steep cauldron. From the western Eger you enter on a plain; both roads join at the Franzensbrücke, and introduce you into Carlsbad on the right shore of the Tepl, where, also, the sprudel takes its origin. Many bridges join the two parts of the town. The streets are generally narrow, with the exception of those called "Wiesen" (meadows). Poor patients are provided for, without distinction of country or religion, in the hospital built at the foot of the Bernhard rock. The environs of Carlsbad are most charming. Picturesque and wild scenery constantly alternates with beautiful park-like clusters of trees; green meadows, with woody hills; dark, shady walks, with widely-spread open perspectives. By the "Puppische Allee," a gravel foot-path leads you to the walks on the ridge and declivity of the Hammerberg on the right, and Laurenzberg on the left. From the "Neue Wiese," an excellent carriage road brings you to the villages of Hammer and Aich, with the rapid Tepl between them. The walks to the so called Himmel auf Erden, to the Posthof, Hirschen-sprung, Schiessschäus, Antons-grübe, Dichterbank, Belvedere, Augustusplatz, &c., &c., offer all exercise and agreeable sights. For further excursions, you are invited by the town of Elbogen (2 leagues to the south-west), situated on a steep rock, and encircled by the Eger river in the form of an elbow (hence its name of Elbogen, which signifies elbow). The city of Schlackenwall (a league to the south of Elbogen), with its lead and tin mines, and Joachimsthal (4 leagues from Carlsbad), where silver mines were worked in the 16th century. The ruins of Engelhaus, on the summit of a high rock, on the road to Prague (2 leagues to the east of Carlsbad), and many other places, furnish a great variety of objects for pedestrian or carriage exercise.

The springs issue out of lime-stone, into which wooden pipes are fixed to distribute and equalize the proportion of the rising fluid. This lime-stone is formed by the water itself, which deposits calcareous sinter in proportion as it loses its carbonic acid. These stony masses extend from one shore of the Tepl to the other, in the middle of the town, and supply foundations for many houses. Wherever you break through these stony coverings, hot water issues. The petrification lies deeper on the right shore, being more particularly fed by the hot source. Out of six mouths, the sprudel water issues with a temperature of 59° Reaumur, = 164 $\frac{3}{4}$ ° Fahrenheit, five being near each other, and the sixth more distant, is the Hygiacensquelle. About 15 yards further, in the bed of the Tepl, a larger hole is bored into the sprudel-crust, and provided with a plug, which is only removed on certain occasions. The above openings are walled in, being situated under the mirror of the Tepl. The wall supports a boarded enclosure, in which you find the chief source, called the Sprudel or Springer (jumper), the water spontaneously jerking upwards in a perpendicular tube, which reaches one yard over the boards, and has a diameter of three inches; the height of the water-column from the ground amounts to 4 yards. About 19 times a minute, the water jumps up and sinks again. This originates

* Which originates in the west, running eastward between Franzensbad and Eger, then between Maria Kulm and Königsberg: passing to the north of Carlsbad, it pursues for some time a parallel course with the Billa, and then joins the Elbe near Leitmeritz, between Dresden in the north and Prague in the south.



from the accumulation of carbonic acid in the upper parts of the sprudel-basin. Its gradually increased expansive power at last breaks a wider passage through the water, which becomes pressed down, in consequence, to admit the issue of the carbonic acid from the water pipe. As soon as this is partially diffused, and diminished on the surface, the water is allowed free scope to rise again, and thus the process continues, emitting alternately carbonic acid and water. The jerks are not all of equal power; generally after eight or ten weaker and quicker discharges, a stronger and more abundant one ensues, with an accompanying dull subterranean hissing. If the plug be removed from the deeper artificial borehole fixed in the Tepl, only gas escapes from the Sprudel, without any water. The other sprudel-openings are covered by boards, and can, therefore, not be seen. The constantly deposited sinter accumulates to such an extent, that the holes must be bored out four times a year to prevent their being closed, and inducing sprudel-eruptions in consequence. In former times these eruptions were more frequent than now, less attention having been paid to the safety holes. One of the most violent happened on the 2nd of September, 1809. On the night of the 1st of September the Sprudel began all at once to jerk its water up with great violence to the height of the wooden ceiling. Removal of the plug in the safety hole induced a quiet flow again. Some hours, however, after the plug had been refastened, the next day (2nd of September) the Sprudel covering broke in several places, and a new Sprudel (*hygiaensquelle*) with the same heat, but more abundant and powerful than the former, issued forth, throwing the water to a height of eight or nine feet. Fissures also appeared in the pavement near the Sprudel, which had ceased to throw its water up, and to emit subterranean hissing. The more distant Schlossbrunnen flowed with less abundance and with diminished temperature, and at last ceased entirely. The new "Springer" (jumper) found about fifteen yards from its predecessor, beyond the "sprudel wall," continued to jerk to the above-mentioned height till its opening was considerably widened, and provided with a large pipe, by which the original spring was restored to its former force, so that the *parvenu* now only flows over alternately, and has scarcely a claim to the title of "Sprudel."

Whether this was a just proceeding from the envious adherents of the older power, and whether it would not have been wiser to let nature have her own way in the matter, is another question. But, probably, past favours caused the thankful burghers to grieve at the sudden debility of the ancient monarch, and at the loss of a power which had excited the wonder of so many persons.

The Schlossbrunnen, reappearing in 1823 (fourteen years after having vanished) with the decreased temperature of 27° Reaumer at first, but having now again 36° Reaumer, 113° Fahrenheit, lies furthest away from the Tepl, and issues out of a rocky ground at a more considerable height than the others. This greater distance from the common source out of which all the springs are supposed to arise, accounts for its diminished temperature. The Mühlbrunnen lies in a dark corner on the other side of the Tepl, about 400 yards from the Sprudel at the foot of the Schlossberg opposite the Mühlbad-bridge. Temperature 45° Reaumer, 132° Fahrenheit. A colonnade extends from this spot along the shore of the river as far as the Bernhard rock; this spring is much used for drinking. About thirty yards further we perceive the Neubrunnen of the temperature of 49° Reaumer, 141° Fahrenheit. From the stairs that lead to the Wandelbahn (promenading path) you descend on the left to the Bernhard's brunnen, the hottest in this region, its temperature amounting to 54½° Reaumer, 153° Fahrenheit (12 Fahrenheit warmer than the Neubrunnen). Ascending some stairs from the colonnade we observe the Theresienbrunnen (formerly called the Gartenbrunnen), with a pleasant shady walk, bordered by lime trees. Temperature 42° Reaumer, 126½° Fahrenheit (formerly 45° Reaumer). Quite at the end of the town, behind the hospital, and on the declivity of the Bernhard rock, the Spitalbrunnen originates, but it is only used for baths. Temperature of the upper spring, 35° Reaumer, 110½° Fahrenheit, and of the lower, 27° Reaumer. In 1838, a new spring made its appearance; the Marktbrunnen, with a temperature of 43½°, about 130° Fahrenheit; and as late as 1844, a mineral source arose below the Bernhard rock, and was named Stephan's brunnen. Its present temperature is 44° Reaumer, 131 Fahrenheit. The freshly drawn water of all the springs is perfectly clear, transparent and inodorous, tasting like weak chicken broth. Exposed to the air, it assumes a milky appearance, and deposits on the surface a whitish pellicle (bath-foam), and after some time a yellowish precipitate falls to the bottom, and then the bath affords a more livid odour. The water of the Mühl and Theresienbrunnen sparkles more than the others. As regards the quantity of the

hot liquids poured out by the respective springs, the Sprudel yields annually 70 millions of cubic feet, the Bernhard's brunnen, 800,000, the Neubrunnen 71,000, the Mühlbrunnen 41,000, the Theresienbrunnen 19,000 cubic feet. With reference to the constituents of the various springs, the same proportions are maintained in all of them, thus proving a common origin, whilst the higher or lower temperature is due to their deeper or more elevated issues. The mouth of the Sprudel being nearest to the subterranean cauldron, exhibits the highest temperature, viz., 59° Reaumer (21 below the boiling point). The Bernhard's brunnen having a lower situation than all the others, after the two Sprudels, possesses a corresponding higher temperature, viz., 54½° Reaumer, (only 5° Reaumer less than the Sprudel). The same proportion is shown in the Neubrunnen and Theresienbrunnen, the two last named lying just below each other, and possessing respectively, the temperature of 49° and 42° Reaumer. The Sprudel contains 41.92 grains of solid constituents in 16 ounces, viz., 19.86 sulphate of soda (about half of the whole amount), 9.69 carbonate of soda (about one-fourth), 7.97 chloride of sodium (about one-fifth), 2.37 carbonate of lime (together about half of the latter), 1.36 carbonate of magnesia, 0.02 carbonate of iron, 0.57 silex. Besides some carbonate of strontia 7-1000, of manganese 6-1000, phosphate of lime 1-1000, basic phosphate of alumina 2-1000, and fluoride of calcium 24-1000. Carbonic acid, 11 cubic inches; specific gravity 1,0049. The Neubrunnen possesses 14½ cubic inches of carbonic acid, the Mühlbrunnen 15½ cubic inches. Theresienbrunnen 36½ grains of solid constituents in the same proportions, and 15½ cubic inches of carbonic acid. Bernhard's brunnen also 36½ grains of solid ingredients, and 13½ cubic inches of carbonic acid. The Schlossbrunnen contains 38½ grains of solid constituents, and amongst them 0.39 of sulphate of potash, and 2-1000 of carbonate of lithia, with 13½ cubic inches of carbonic acid. The Mühl, Theresien and Neubrunnen, abounding most in carbonic acid, are frequently used for drinking, and exert a less exciting influence, from the abundance of carbonic acid and from their lower temperature. The Schlossbrunnen being cooler and not deficient in carbonic acid gas, is generally recommended for commencing the course, and is also used for exportation.

If about eight glasses, of four ounces each, be drunk of the Sprudel during the day, four scruples of solid ingredients will have been imbibed in twenty-four hours, and about four ounces in a month.

Springs of fresh and sweet water are rare about Carlsbad. As regards the Tepl, I have still to add that its fall from the source amounts to 600 feet in its short course of thirty miles. The granite rocks, from which the sources originate, are partly of a large granular structure, with interspersed fluor-spar, quartz, and glimmer, easily falling into gale and sand, and partly of small granular structure, with yellow fluor-spar, greyish-white quartz, and small glimmer leaves, assuming a more flattened shape by separation. The hornstone veins, which occasionally permeate the granite, have already been alluded to. Some layers of argillaceous porphyry are found taking the same direction as the thermal springs. Peat, sandstone, and basaltic cones are likewise intermixed with the neighbouring mountain masses.

The sprudel-water covers with white, brown, or yellowish incrustations all subjects over which it has passed for some time. The colour depends partly on the access or exclusion of atmospheric air. In the former case, oxide of iron will make the sinter darker, and in the latter it will be merely calcareous, and display a white colour. Pisoliths (pea-stones) are also products of the thermal water; probably grains of sand formed the nucleus round which calcareous sinter became deposited. Is it not surprising, gentlemen, that this very liquid with its remarkable petrifying property, should be the most powerful solvent in hepatic enlargements and abdominal infarcta? Tough, viscid, intestinal mucosity becomes mobilised and excreted; collected and indurated faeces are discharged; the torpid portal circulation is called into greater activity by the removal of acrid obstructing particles. The increased production of animal matter, the source of gout and lithiasis, is powerfully counteracted by the spa. The exciting effect of heat is considerably diminished by the revulsive action, which the sulphate of soda exercises on the intestinal fibres, so that common water of the same temperature as the Sprudel would cause a much higher degree of cerebral excitement and general sanguineous orgasm. The carbonate of soda contributes the chief share in the marked action on incipient lithiasis, exercised by the spa. Excessive acidity of the organic juices is neutralised, formation of uric acid prevented or diminished, and thus vesical irritation allayed. The addition of chloride of sodium may chiefly perform the function of improving the digestive process by increasing the strength of the gastric juice, through the formation of hydrochloric acid, so that alkalescence cannot reach too high a degree, whilst the soda combines with the albu-

men of the abnormal or excessive fat, or organic pseudo-production, and prepares them for elimination. The carbonate of lime and magnesia assist the antacid and antilithic efficacy, whilst the manganese, iron, and silica, increase the tone of the intestinal fibre, and thus tend to prevent the too-weakening effect of these highly solvent and antiplastic media. Imagine these particles introduced into our organism, with the warm liquid and the accompanying volatile carbonic acid, and you will not be surprised at the remarkable changes wrought in those numerous inveterate diseases which originate in abdominal obstruction and retarded portal circulation. The highest reputation is, however, enjoyed by the spa in hepatic or splenic physconia, the consequence of intermittent fever, in colic produced by gallstones, &c.; and from all parts of the globe you may see individuals with puffed-up and icteric appearance, and with unmistakable signs of depraved bilification. Although many are cured, I need not tell you that some are disappointed, and others, particularly if resorting to the spa without due discrimination, find their complaints aggravated, and this may especially happen, if the Sprudel be at once incautiously used, for care on this head is required even with persons of torpid circulation. The vascular and cerebral system often show signs of agitation, as headache, giddiness, lassitude, forgetfulness, disinclination to exertion, restlessness, loss of appetite, sickness, &c.; these phenomena sometimes appear, in a slight degree, even in phlegmatic individuals, when first using the hot springs—in fact, a sort of mild intoxication is induced. How much more, then, may we expect plethoric persons to be affected, and those disposed to cerebral congestion, apoplexy, inflammation of internal organs, or great general irritability! Such patients must, therefore, never be recommended to avail themselves of Carlsbad, though the state of their hypochondriac organs may appear urgently to demand it. Generally speaking, it is the most renowned mineral water against hypochondriasis, with material basis, or in diseases caused by repression of piles, which are made to flow, and thus relieve the system from the array of metastatic and metaschematic disorders, to which such invalids are liable. On the other hand, a person who suffered with habitual giddiness after an intermittent fever, sent to Carlsbad, found the fever reproduced, which, however, healed by itself, and carried its metaschematic remnant off without further medicinal means. That callus of previously united bones often softens again, has been established by several writers. Former wounds, or seats of gouty and rheumatic affections, become painful and appear excited for some time, till crises ensue by the bowels, skin, or kidneys, and restore the former state of health. Anomalous gout, connected with deficient hepatic function, is frequently cured here. Besides the states of plethora referred to above, Carlsbad is also contra-indicated in actual digestive atony, or in general debility, produced by loss of blood or other weakening causes, in dropsy, scorbutic tendency, in phthisis, and internal suppuration, in lithiasis with great irritation, and such large stones as cannot pass through the urethra, in organic diseases of the heart, in chlorosis, &c. Increased salivary secretion sometimes critically occurs during the course, and lasts for several days, probably caused by reciprocal influence of the stimulated pancreas. Appetite is heightened at first, but as the course proceeds, flatulence, eructation, pressure on the pit of the stomach, tickling, and stitches in the hypochondria, clammy taste in the mouth, &c., now and then take place, and only yield after the critical discharges by the bowels, skin, or kidneys have appeared.

The purging produced by Carlsbad, differs from ordinary purgation by very fetid, bilious, mucous, and fatty stools, more charged with actual pseudo formations or abnormal concretions, than with the serum of the blood; it is, therefore, more an alterative of sanguification, than a weakening agent, though, from the above cautions you may infer, that a certain amount of vital stamina is required for undergoing a regular course. But the alvine evacuations are not invariably increased; an opposite effect sometimes takes place, and then the Carlsbad salt is usually added. As regards the choice of the respective springs, you have not only to consider the various effects of heat, but also the difference of the quantity of carbonic acid. Its amount is smaller and its intrinsic impregnation less adherent in proportion as the temperature is higher; whilst thus in the hotter, even during use, the solvent power exercised by heat naturally slackens with the decreasing temperature, and whilst the more rapid loss of carbonic acid causes the earthy bicarbonates to become sesquicarbonates, and more liable to precipitate, we have in the cooler a greater abundance and a more intimate adhesion of the carbonic acid, consequently, a somewhat longer stability of the composition, the combinations of carbonic acid retaining, for a longer period, the character of bicarbonates, with less liability to deposition. If you wish, then, to produce a deeply penetrating action, and to excite the function of

the skin and kidneys more particularly, you will give the hottest, the Sprudel (59° Reaumer). If you find a heightened alvine function to be the chief requisite, you will recommend the Mühlbrunnen (44½° Reaumer), or Theresienbrunnen (42° Reaumer); but if you merely desire an alterative action, a check of the abnormal mucosity and pinguefaction, and a remedy against vascular erethism, you will employ the coolest of the thermal springs, the Schlossbrunnen (temperature 36° Reaumer).

A very frequent mode is to drink the cooler springs at first, and after some time combine them with the hotter in this way:—Suppose the patient receives four to six glasses of Schlossbrunnen first, and increases the number; after some time he substitutes for the last glass of the cool spring that of a hotter one, then for the last two, for the last three, and so on, with care and under inspection of his medical attendant. Of course a great deal depends in this respect on the individual experience of the respective physicians, of whom there are not fewer than seventeen; at their head the veteran of spa physicians, Dr. de Carro, then Drs. Hochberger, Hlawacek, Fleckles, Forster, Preiss, Osterreicher, &c.

Though the chief efficacy be expected from the internal use of the springs, baths are also resorted to in the cooled mineral water. The vapour of the Hygieensquelle is collected for vapour baths. Douche baths, as well as clysters, are likewise employed in appropriate cases.

Not content with all the above media, moor is dug up at a distance of about two miles from Carlsbad, and mixed with sprudel water for bathing, in cases of chronic rheumatism, anomalous gout, in chronic exanthemata, &c. They are also used as poultices in analogous local affections.

I have still to mention the Carlsbad salt, which is obtained by the natural evaporation of the sprudel water, in vessels fixed to the bore-holes, whence formerly the water ran to waste into the Tepl river. The crystallised salt consists chiefly of sulphate of soda, with an inconsiderable admixture of carbonate of soda, and a minute quantity of lithia. Exposed to a strong heat, it immediately deliquesces. One ounce requires, to effect its solution, about double the quantity of cold, and nearly 11 drachms of hot water. The crystals of common Glauber salt are much firmer, and require longer time for deliquescence. 1,700 pounds of the salt are annually obtained. It acts as a gentle and cooling purgative, without weakening or irritating the intestinal canal. Fr. Hoffman often prescribed it with dec. tarax. or gramin. in dyspepsia and flatulence; as a diuretic and lithontriptic with nitre; with bark and cascarrilla in ague. Often before beginning the course of the Carlsbad springs, a preparatory dose of 1 to 2 drachms of the salt is administered for one or two days.

To prepare a salt, which should unite all the soluble ingredients of Carlsbad water, Dr. Hlawacek proceeded in the following manner:—He evaporated the obtained mother-lye without causing the sulphate of soda to separate in crystals; then he dissolved the dry mass in Schlossbrunnen water, filtered, and evaporated the solution. In the resulting yellowish-white powder, chloride of sodium and carbonate of soda maintain the same proportion as in the water itself. He considers it more powerful than the usual Carlsbad salt, and recommends it for exportation and employment with the Schlossbrunnen, especially in lithiasis. He also introduced "sprudel" soap. Finding great advantage from the external application of common soda-soap, dissolved into a pappy consistence, in hepatic enlargements, he concluded that the solvent power of the water must be greatly assisted by a soap prepared with sprudel salt; and his expectations having been realised, he employs it in many instances with very satisfactory results. After the course of Carlsbad is completed, Teplitz is generally resorted to as an after-cure by persons of a gouty disposition, to have a gentle continuance of the same alkaline action, without the lowering and anti-plastic influence of the sulphates. The nervous power is thereby raised, without counteraction of the previous efficacy. More liberal diet is likewise permitted without injury, if used with reasonable care, and with gradually increased allowances. A very important warning to continental patients is almost superfluous to the English, viz., to avoid drinking water or other cold beverages after taking fruit. This pernicious habit may not always engender the cholera as it did on the occasion I mentioned in a former lecture, but injurious it must be after such a strict diet, and such liquefying beverages had considerably attenuated the organic power of resistance, at least for some time. And here I may state, by the bye, that the rational manner of English living is one of the greatest safe-guards against epidemic diseases.

No wonder that life should be longer here than in many parts of the continent, with a considerably greater freedom from avoidable diseases during the allotted period, and with comparatively greater physical resisting power, and other unmistakable signs of improved nutrition. As regards food, whilst in this island the

most tender flesh from the best-fed domestic animals is simply exposed to the action of heat, just sufficient to increase its solubility in the gastric juice, in many parts of the continent skilful cooks have to prepare savoury liquids out of the albuminous and gelatinous portions of the meat, and to season them in such various modes as to make a very agreeable impression on the palate. The warm liquid distending the stomach does not for the moment increase the tone of its muscular fibres. Nevertheless, the tougher and more fibrinous portion, the parent of the juicy soup, is now introduced, and forces the stomach to unwilling action. Some other dishes make their appearance with the mere object of recalling the vanishing appetite, and of creating an artificial desire for a greater reception of food. And even now, when the more substantial dishes come before you in their various shapes, art must improve on nature and make them more palatable, by sauces and numerous intricate contrivances. However satisfactorily all may appear while at table, still on rising, although you may have taken an inconsiderable sum total of really substantial nourishment, you feel overloaded, your movements are impeded, the physical oppression reacts on the mind, drowsiness, lassitude, and incapacity for any exertion naturally ensues. An artificial stimulus, both for abdominal action and nervous power, is called into aid—viz., coffee.

Now just imagine the consequences. Whilst the one satiated the want of nature, and supplied the organic waste by the simplest substitute, which had merely to be dissolved and reconstituted into its former atoms, to produce healthy chyle, the most appropriate for performing the nutrient function of the whole body; the other imposed five times the work on his teeth, on his salivary glands, and abdominal viscera, and when all is summed up, when the whole mass is sifted for contributing its share towards nutrition, the very purpose of the whole laborious task, why it is found that very little can be used for sanguification, at all events less than from the former simple and short repast. Add to this increased work the proportionally advanced inability of performance, and you will not wonder at the thousands and thousands who suffer from piles, at the numerous atonic diseases of a vicious sanguification, at the frequently debilitated constitutions, and at the shortened period of existence, affecting so many individuals from avoidable causes. The injurious influence of excessive smoking, on the composition and power of the mechanical masticators, prevents the proper admixture of saliva, and the necessary comminution of the food, and thus heightens the evil.

There is another point of influence which, however, does not bear on the present question—viz., the universal regard for domestic life and in-door comforts here. Whilst the hearth surrounds the body with comforts, the soul pours out its joys and griefs to a sympathising mind, the nervous system enters into the calmness of a restored equilibrium, and readily receives its necessary food—sleep. In other places, however, where public life, public comforts, public enjoyments, furnish such a frequent substitute for domesticity, the inward thoughts are locked up before the comparative strangers or mere boon companions, and when the wearied limbs are stretched out for repose, when the brain craves for its retarded rest, the uncommunicated thoughts and occurrences too often stir up associations of other ideas, and keep the over-fatigued cerebral organs to their unwilling task. The shortened portion of sleep will cause the next day's vitality to be less integrant, and thus, in many instances, life will go on with a curtailed duration and weakened intensity. Of course, I merely describe extreme states, but many unappreciated trifles are quite sufficient to engender deplorable effects, and it may be useful for you to be acquainted with the sway often exercised by cookery in other parts of the globe, so that a modified treatment will be suggested to you if such patients claim your care. The increased intercourse of nations necessarily resulting from this year's exhibition, will, undoubtedly, be permanent to a considerable extent, so that it behoves our profession to take cognisance of national morbid causes with which we are not immediately connected. The numerous prejudices still mutually harboured will vanish by personal acquaintance, and you may then find many subjects of foreign realms travelling and sojourning in the different localities of this empire, and you will be better able to treat their ailments by a closer acquaintance with their habits.

But to return to Carlsbad: Franzensbad is used as an after-cure in hepatic derangements, when a combined action of sulphates with tonic remedies is sought to be continued for completion of a commenced or progressing cure. A very remarkable instance came to my own notice. When visiting Franzensbad I happened to be introduced to two Hungarian ladies (sisters, and both married,) who came from a distance of 150 German miles (about 750 English,) for the following complaint:—The younger sister, about 30 years of age, of a small and rather puny but otherwise

healthy appearance, had suffered for two years with obstinate intermittent fever, and induration of the liver. Large doses of quinine succeeded in relieving the fever, but only for a time, and she could always reckon on a return as soon as her menstruation appeared; then her sufferings in the right hypochondrium were very severe and refused to yield to antiphlogistic and other remedies. The elder sister related to me that the sufferer's life had become a positive burden to her, all enjoyments being thwarted by these regularly recurrent attacks. At last she was advised to resort to Carlsbad, which she used for five weeks, the induration of the liver diminished, but she felt still frequent pains in the right hypochondrium, and left very much debilitated for Franzensbad. In the latter spa she had used moor-baths for one hour every evening, and drank the Kalte Sprudel during three weeks, and at the time I saw her she was completely cured, and about to rejoin her anxiously expecting family. I was assured by the patient's sister that I should not know her from former acquaintanceship, so much changed was her appearance. Whether the attacks subsequently returned or not I have no means of knowing, but certain it is, that the two sisters left Bohemia with the greatest happiness and gratitude for their restored health. The details of the previous suffering and misery were really so pitiable, that no one could help rejoicing at her recovery and improved mental condition. Wilful or involuntary deception is in this instance entirely out of the question, for they knew the purpose of my visit to be personal examination of the alleged efficacy of the springs, and therefore minutely communicated to me as exact a description of the former and present state of the health of the patient as possible. They would be monsters in human form if they could attempt deception to the injury of others, without the remotest chance of advantage to any one. Besides, no very great amount of penetration is needed to recognise such an attempt, even if extending to exaggeration only. Perhaps you would prefer the report of her physician to her own account. But, gentlemen, a chief reason why I think the mineral waters ought to form a distinct branch of medical education, though properly belonging to *materia medica*, is the circumstance that an exact knowledge of the specific efficacy, inertness or injury of the respective spas, cannot be obtained without vocal examination of the patients themselves. For I have already pointed out to you in a former lecture, that the chemical constituents of the various springs afford in many instances no distinct, and in others only general indications. To recommend, therefore, this or that spa, with the positive assurance of having made a good selection, you must either undertake the above-mentioned examination of the different spas yourselves, or be taught by impartial medical observers, who have been enabled fully to accomplish their purpose by their knowledge of the language, manners, and customs of continental inhabitants. I hope and trust that you will not meet with that other mishap also occasionally occurring, viz., that patients are directed to certain spas with detailed accounts of their complaints by their medical advisers, and when examined by the spa physician, he occasionally finds, to his infinite regret at inflicting such a mortification on a distant *confère*, that his spa is positively inappropriate, so that he is compelled to send the patient to another spa, or to persuade him to return home again by easy journeys.

With what feelings of disappointment will such a patient meet us again; and still we cannot blame the foreign spa physician, who would have much preferred availing himself of our kind recommendation and sending the patient back to his home, cured or relieved.

Thus persons with schirrus or carcinoma uteri have been sent to Carlsbad, individuals with developed consumption and hectic fever to Ems; rheumatic patients with organic diseases of the heart to Wiesbaden; paralytics with distinct apoplectic tendency to Gastein, &c.

Such errors you will of course avoid, and the more extended your knowledge of the chief foreign spas will be, the better you will be able to select in many appropriate cases a reputed English watering place, and afford to your patient the advantage of being in constant communication with his ordinary medical adviser.

(To be continued.)

CORRESPONDENCE.

To the Editor of 'The Institute.'

SIR,—Dr. Barker, of Bedford, in a recent number of your journal, has given us the particulars of a very interesting case of an internal hemorrhage occurring before delivery. In the course of my practice I have met with three cases which prove the possi-

bility of such an occurrence. Taken by themselves, they are not worth publishing; but, as a sort of reply to Dr. Barker's request, perhaps you will consider them as bearing sufficiently on the subject to render them worthy of record. I copy the notes from my register exactly as I wrote them at the time:—

"No. 601. March 8, 1841.

"*Premature.*—There was a very firm little coagulum adhering to one edge of the placenta, which appeared indurated at that point. Query—Did the premature separation of that diseased portion of the placenta bring on the labour?"

"No. 620. May 8, 1841.

"*Breech presentation.*—A six months' fetus, still-born. There was a firm coagulum adhering all round the edge of the placenta, proving that there had been premature detachment of part of that organ,—the probable cause of the death of the child, and of its premature expulsion."

"No. 899. February 6, 1844.

"There was considerable hæmorrhage when the os uteri began to dilate, though the placenta was not to be felt. It ceased on the rupture of the membranes. When the placenta was expelled, I found a large and firm coagulum adhering to one of its edges, which proved that the placenta was very near the os uteri; that a corner of it became consequently detached when labour commenced, and that the blood then passed between the membranes and the uterus. The pressure of the head stopped this flow, and then the coagulum formed. Does not this case prove that there may be a degree of internal hæmorrhage, even before the child is born?"—*Vide Cases 601, 620.*

The occurrence of internal hæmorrhage to any extent before delivery must be very rare. That it may take place at all, it is necessary, I conceive, that a portion of the placenta should become detached at some distance from the os uteri—at such a distance that the os uteri in dilating can hardly have had any effect in tearing asunder the connection. The separation, therefore, must be the result of some other cause than the contraction of the muscular fibres of the uterus. In the last of my three cases, the separation of the placenta was manifestly due to the action of the os uteri, and in that case the hæmorrhage was not exclusively internal. In cases where the separation takes place at such a distance from the os uteri, that its action cannot have caused it, if there be any hæmorrhage at all, it must be internal; but, for many reasons, it must be exceedingly limited in extent, as took place in my two first cases.

I am, Sir,

Your most obedient Servant,

R. U. WEST.

Alford, Lincolnshire, February 24th, 1851:

'To the Editor of *'The Institute.'*

SIR,—I send you a case of uterine polypus which occurred in my practice seven years ago.

Mrs. H—, a lady of high respectability, the mother of four children, had been suffering for a long time from alarming hæmorrhage, which reduced her very much. On making an examination, per vaginam, I found a substance—a polypus—the size of a large pear. I applied a ligature round the pedicle; it withered and came away speedily. The hæmorrhage ceased, and her health and strength soon returned.

Very truly yours,

S. SMITH.

Weaverham, February 22, 1851.

MEDICAL INTELLIGENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 11, 1851.

DR. ADDISON, President, in the chair.

A CASE OF CÆSARIAN SECTION.

By HENRY OLDHAM, M.D.,

Obstetric Physician and Lecturer on Midwifery, &c., at Guy's Hospital.

THE subject of this case was a rickety, deformed girl, aged 23, unmarried, pregnant with her first child, and seven months gone in gestation, when first seen by Dr. Oldham. On examination, the pelvis was found to be reduced to two inches in its conjugate diameter, and the uterus was much anteverted.* The membranes

were punctured for the induction of premature labour, a few days after she was first seen, September 23rd, 1850. On the following morning, the left arm was found in the vagina, but labour did not come on until nine A.M., on the 26th. In twelve hours the os uteri was dilated, and then some attempts to deliver her were made. The child could not be turned; but, by drawing down the protruding arm, which, from commencing decomposition, soon gave way, and pressing the abdomen from below, the head was brought over the brim, and was at once perforated. For four hours the crotchet was employed, both inside and outside the head, the bones of which were completely torn up, but without drawing it through the brim. At this time a new impediment was found to have arisen, from the descent of the right hand and a foot, by the side of the collapsed head, into the pelvic brim; and, on watching the effect of labour pains, all these parts were felt to be squeezed together in the narrow inlet of the pelvis, each preventing the other's descent. It was attempted to bring down either the foot or hand, but only the slippery tips of each could be touched, and they could not be moved. The patient had now been seventeen hours in labour, and it became a question for serious consideration and consultation, whether she would be able to sustain the necessary efforts for her delivery, and whether it would not be for her benefit to perform the Cæsarian section before exhaustion came on, which at length was determined on. The operation was performed by Mr. Poland, without difficulty, and with little hæmorrhage, the patient being under the influence of chloroform. The incision, five inches long, was slightly curved, and a full-sized seven months' fetus was removed, and afterwards the placenta and membranes. For two days the patient did well, but then exhaustion came on, and she died. While she lived, she was kept under the influence of opium, and was sustained by simple cold drinks. On *post-mortem* examination, there were some slight traces of peritonitis near the uterus. The external opening was closed, and its edges adherent, but the uterine incision was gaping. The larger omentum was indurated and inflamed, and so drawn across the uterus, above the incision, as to prevent any discharge from the latter organ escaping into the peritoneal cavity. Two practical questions were suggested by this case. 1st. What was the best plan to attempt to follow out in the delivery at first. 2nd. Were the complications such as to justify the Cæsarian section. With respect to the first, two plans of treatment might be adopted: 1. To induce labour, and deliver by craniotomy; 2. To allow her to go to term, and then perform the Cæsarian section. In determining in favour of the former, the author was guided by the great probability—with a conjugate diameter of two inches—of being able to deliver with the crotchet, and he considered that his inability to do so arose from the complex presentation. With reference to the second, he was induced to have recourse to the Cæsarian section, from a conviction that the patient would probably sink under the prolonged efforts at delivery; and a case was related which occurred in the Lying-in Charity at Guy's, under Dr. Ashwell, where a woman with a far less contracted pelvis died undelivered, after the powerful and sustained efforts to relieve her. It was remarked that the girl had but a feeble constitution, which would ill support so hard a trial of its powers, and the condition of the vagina was particularly noticed as retaining the marks of early age, being structurally weak and easily lacerable, and most unfavourable for a long craniotomy section. Under these circumstances, the Cæsarian operation offered a speedy and sure, instead of a prolonged and doubtful delivery. It was not yet forbidden from exhaustion, or any signs of inflammation; on the score of suffering it contrasted most favourably with the persistence in the use of the crotchet; and, upon the whole, it was judged to offer a better chance of ultimate success. The curve in the incision was suggested to catch the outline of the muscular fibres on the inner surface of the uterus, and so favour the closure of the wound. The scanty hæmorrhage during the operation was in a measure accounted for by the uterus being at the seventh instead of the ninth month, by the placenta being attached to the posterior wall, and the uterus being opened low down towards the cervix, where the veins were less developed. Chloroform was said to be a gain in every way, and the after-treatment by opium appeared satisfactory.

Dr. Murphy remarked that he had moved the adjournment of the debate at the last meeting, in consequence of Dr. Lee's speech, which was evidently a written and well prepared speech, and such as could not be answered on the spur of the moment. It was his object now to examine the facts, and put them properly before the Society. Dr. Lee had professed to give the history of the Cæsarian section, commencing with Guillemeau and Mauriceau, and he had pointed out the extremely fatal results of their practice, and their subsequent condemnation of the operation, the latter describing it as barbarous, cruel, and inhuman. From

* The skeleton pelvis was exhibited.

Mauriceau, he traced it onwards, explaining how this operation was silenced here by Chamberlen's translation of Mauriceau's work, and also by the influence of that great name all over Europe. The operation was afterwards revived on the continent, not by the profession, but by the influence of the clergy, who asserted the child's soul should be saved, as well as that of the mother, and that for that purpose certain formulæ were required. This was an explanation of the fact that the operation was more practised in Catholic countries than in Britain. Dr. Lee then brought forward the results of the British operations; out of twenty-three cases, in only two the parents recovered; the remaining twenty-one died. Of these two cases he threw a doubt on one. Mr. Barlow's case he did not believe in at all—and the conclusion he drew from the table was, that if these two cases were set aside, in the British records of the operation, there was not a single instance of the operation in which the mother had recovered. Dr. Lee then drew a parallel between the Cæsarian section and the induction of premature labour, and, after speaking of the introduction of the latter operation into practice, gave it the priority over Cæsarian section. He then applied this to Mr. Wren's case, and asked how it was that, while under his care, his patient showing symptoms resembling rheumatism, with difficulty of walking, &c., he thought of the Cæsarian section, and not of the induction of premature labour. He made the same charge against Dr. Rigby and Mr. Skey. Why did they not induce premature labour, instead of performing the Cæsarian section? He then quoted the case of a patient of a medical friend of Dr. Simpson, residing at Cupar, in Fife, who had been seen some time before labour commenced, and was ascertained to have a contracted pelvis, and in whose case it was decided the Cæsarian section was necessary. Labour commenced, Dr. Simpson was sent for, but the child was born without instrumental interference, before he arrived. After this *resumé* of what Dr. Lee had stated, he (Dr. Murphy) would beg most respectfully to protest against the Society's being made the medium of any attacks against a member of the profession, for the attack calls for a reply, that leads to a retort, and that again to recrimination, and thus their discussions might degenerate into the paltry altercations of a debating club.

The President did not consider that Dr. Lee had indulged in personalities on the previous night, but was merely contravening opinions. Had he thought so he should have stopped him.

Dr. Murphy felt quite sure the president would not allow any personal remarks; but the characters of medical men depend so much on public opinion, that they are very tenacious of any such observations. From Dr. Lee's remarks on Dr. Simpson's case, it might be supposed that it was a case of natural labour, without much distortion of pelvis, and that it was a species of Quixotism to propose to operate. But what were the facts? He had in his hand Dr. Simpson's account of the case—a case almost unique. The pelvis was decidedly contracted and exceedingly deformed. The sacrum was straight above, so that the promontory did not encroach on the brim (and there Dr. Lee stopped). The inferior extremity, however, was curved forwards, and the outlet was extremely deformed. The transverse diameter was greatly contracted, and it was impossible to introduce two fingers between the tuberosities of the ischia. How then was it that the child could be born without assistance? Because, in consequence of the diseased condition of the placenta and of the ovum, the structure of the child was so completely altered, that it resembled a bladder, full of semi-liquid contents. It measured 18½ inches, and weighed three pounds three ounces. It had evidently been dead some time; the head was enlarged by putrefaction; the bones of the arch of the cranium were all separated, and floating about, and so also were those of the base, and even the symphyses of the jaws were loose. Under these circumstances the child readily passed through the contracted pelvis. So much for Dr. Simpson's case. To revert to the case of Mr. Wren and Dr. West.—Dr. Lee had asked why was not premature labour induced at the fifth month? He, in his turn, would ask on what grounds it should have been done? There was not any outward indication of deformity, nor was the inability to walk so great as to authorize the assumption that mollities ossium existed. The day before labour occurred, the patient was able to stand up, and hang up some curtains. More than this—the patient was pregnant for the first time, and he (Dr. Murphy) believed that Dr. Lee admitted that the rule was not to induce premature labour in first pregnancies, because we are not able to ascertain with accuracy the precise disposition of the pelvis, and that we should not be able to extract the child with the forceps or crotchet. That this was the rule generally laid down, he might quote Dr. Lee himself, who in the 137th case in his 'Clinical Midwifery,' said that it was an instance of a first preg-

nancy, and that he then for the first time attempted to induce premature labour. This was in 1838, and consequently he (Dr. Lee) was then of opinion, that the operation was not to be practised in such cases. He trusted, therefore, that the Society would acquit Mr. Wren of error, in not inducing premature labour in the case before them. To go back to Dr. Lee's history of the Cæsarian section; he must say that Dr. Lee had shown great ingenuity in his mode of treating the subject. He had gone quite beside it; the question was not between the Cæsarian section and the induction of premature labour, for no one could say that when premature labour could save mother and child, that he would have recourse to so formidable an operation as the former. The profession were satisfied that the induction of premature labour was not only superior to the Cæsarian section, but also to craniotomy, and he (Dr. Murphy) would ask Dr. Lee how it was that when he knew the superiority of inducing premature labour, he had preferred using the crotchet in 127 cases, and thus sacrificed so many human lives when premature labour might have been induced. He mentioned this to show the danger of propounding such questions. The true question was not between the Cæsarian section and the induction of premature labour, but between the Cæsarian section and certain cases of greatly contracted pelvis, in which it is almost impossible to deliver by any other means. Dr. Lee had referred to Mauriceau, and his condemnation of this operation. He (Dr. Murphy) would also refer to Mauriceau—to his 26th case—a case which was well known, because Chamberlen had attempted to effect delivery with his forceps. The patient had been eight days in labour; on the fourth she was seen by Mauriceau, who was unable to induce delivery. He prescribed for her, and saw her again on the seventh day, when he was still unable to extract the child. A pupil suggested the Cæsarian section, but Mauriceau refused. Chamberlen then tried his forceps, but the woman died undelivered, and the injury to the uterus, which was gangrenous, and full of holes, was attributed, but erroneously he thought, to Chamberlen's instruments. Dr. Murphy then enumerated other cases of malacosteon, in which delivery could not be effected. One happened to Hamilton, of Edinburgh; the child could not be extracted, the uterus ruptured, and the woman died undelivered. Mr. Dunlop had another, Mr. Ridgway a third, and Mr. Bowen a fourth. In all these cases, it was impossible to deliver on account of the contracted state of the pelvis; rupture of the uterus or vagina occurred, and the women died undelivered. Dr. Meigs had latterly had a case in which he attempted to perform perforation. The operation occupied, not hours, but days, and after endless difficulties he succeeded in extracting the child. This patient in subsequent pregnancies, was delivered by the Cæsarian section, not once only, but twice, and she and her children survived. The last case he should notice was that of Mrs. Jarvis, recorded in Dr. Lee's 'Clinical Midwifery.' On January, 1830, she was delivered by Dr. Lee with the crotchet, with extreme difficulty. He did not then think of the induction of premature labour, but again delivered her in July, 1832, at the full time with the crotchet. In June or July, 1833, abortion at the fifth month was successfully induced, and again in 1835, but he failed when he next tried, in January, 1836, and also in the month of February, but succeeded the month after, when the patient was nearly in the eighth month of pregnancy, an instrument having been made for the purpose. The failure in February was partly attributed to the loss of sensation and motion in the forefinger from a dissection wound. Meanwhile the malacosteon was making progress, and Dr. Lee began to anticipate the necessity for the Cæsarian section. Ultimately, however, the child was extracted, and survived with difficulty, but the mother died of ruptured uterus. He mentioned these cases to show the nature of those in which this operation should be had recourse to, and he would ask if it were possible in such instances to extract the child. He (Dr. Murphy) was fully of opinion that when we were by no means certain of saving the mother's life, and craniotomy could not be practised, it was not right to throw away the life of the child. He trusted the society would inquire into the causes of death in this operation.

Mr. Wren said, his remarks were intended to be brief, and they would be more so in consequence of what had fallen from Dr. Murphy. Whether or not Dr. Robert Lee's remarks be considered as personal, he, (Mr. Wren) certainly felt that the assertion made and copied into the Medical Journals affected him very seriously. Dr. Robert Lee remarked, and so it is reported in the *Medical Gazette*, that had this patient fallen into Dr. West's care in the early months of her pregnancy, he believed the result would have been different. Now, he (Mr. W.) maintained that this assertion was unwarranted and was unjust. He would ask Dr. Lee whether or not it is his practice, or the general practice of

the profession, without sufficient cause and excuse for so doing, to request permission from their pregnant patients (with the structure of whose pelvis they were ignorant) to allow an examination, and also whether such permission as a general rule would be granted? Would this interference without a just plea be tolerated? If the answer to that question be, as he firmly believes it would be, No, you are not justified in subjecting your patients to such an examination without a sufficient and reasonable cause, he thought he could state sufficient to satisfy a majority of the fellows of this society, that the symptoms that presented themselves in this instance were not such as would warrant his seeking it, or even such as would tend to the suspicion of disease. The symptoms, as depicted by Dr. Robert Lee, gave the impression of sufferings vastly more acute than was really the case. Mr. Wren then proceeded to give his version of the symptoms that presented themselves on the occasion of his first seeing his patient, and also of those present during the time of his attending her up to the day on which the operation was performed; and he remarked that the notes which he read were those (without one word abstracted or added) from which he copied those furnished to Dr. West. He vouched for their correctness.

Case.—E. W. became his patient December 29th, 1849. She was 25 years of age, married, of small stature, rather disposed to stoop, otherwise not apparently deformed. She was at that time five months advanced in pregnancy. She represented her health as having been always delicate; complained of distressing heartburn, pain in the head, thirst, sickness, loss of appetite; stated that she had constant fainting fits; that a morning rarely passed without such. Pulse 130 and upwards. Bowels irregular and constipated. Dreaded her confinement, and observed that she was sure that she could not go through it, unless she was rendered insensible by means of chloroform, the effect of which she had experienced.

Ordered Magnes. calcin., 3 ss. o. mane. Decoct. Aloes, comp. 3 ss. T. Hyoscyam. Spirit. Ammon. Aromat., aa. 3 ss. ter quotidie.

January 4th. She told him this day that on the occasion of his previous visit she was nervous and agitated; had had several fainting fits. These usually occurred in the morning on first awaking. Heartburn not relieved by the medicine. Pulse 120. He (Mr. W.) ordered the following:—

Magnes. calcin., ʒi. Spirit. Ammon. Aromat., 3 ss. Tr. Hyoscyam., m. xx. Ess. zingib. m. x. Acid. Hydrocyanic (Scheele's strength) m. ss. Crocosoti m. ʒ. ter quotidie.

This she continued, occasionally taking two instead of three doses daily. When the bowels failed to act so freely as they ought, Magnes. sulph., 3 ss., was added to each dose, and that was found sufficient to produce free evacuations. Under this treatment, which was pursued with little or no variation for nearly three months, she regained her appetite, the sickness subsided, the fainting fits became rare, indeed almost ceased, and she had much more rest at night; her pulse, however, still remained at 120. This singular rapidity was noticed on the first visit, and was observed to be constant through the whole period of his attendance upon her.

March. At the commencement of this month she complained of suffering severely with cramp, and that the slightest exercise produced it; pleaded that as an excuse for not taking the exercise which he urged. Upon each occasion of his requesting her to allow him to examine the heart, she objected, stating that the medical men who had previously attended her (amongst whom she mentioned Dr. Hamilton Roe) had always pronounced her heart to be free from disease, at the same time she remarked, unsolicited by him, that they had all told her that her pulse was never less than 120.

May 1. She was at this period very much better, and expressed herself as feeling so; said that she felt altogether in better spirits; slept well; complained of nothing but heartburn (which she said she contrived to relieve by taking an extra dose of the medicine) and cramp, but that the latter was not so severe as formerly. Pulse now 110.

May 7. Mr. Wren was sent for at three A.M.; on his arrival he found her suffering with slight pains. Upon making an examination, he found the external outlet so narrow that it was requisite some determination should be come to, as to how and by what means delivery should be effected. He despatched the husband for Dr. West, who arrived one hour after.

Mr. Wren then asked the Society, was there *one* symptom that could lead to the suspicion of pelvic disease?—were not the symptoms described similar to those very frequently met with in patients during the early months of pregnancy?—were not the pains and ailments at that period very anomalous and indescribably varied? Dr. West was in error in stating that this patient was incapable

of walking. He (Mr. W.) believed the Dr. must have misunderstood the husband on that point, or he certainly was misinformed, as he (the husband) positively states that she went daily, and without the least assistance, from the sitting-room situated on the first floor to the water closet, to reach which she had to pass down three flights of stairs, and to traverse a yard twenty feet in length. The husband certainly may have told Dr. West that, for the last two months of her life, he was in the habit of carrying her from her bed to the sofa, and from the sofa to the bed—and the society might not unreasonably infer from this that her husband carried her because she was unable to walk: but she never failed on one single instance, during the time of his (Mr. W.) attendance before the operation, and on each visit that he made her, to rise from the sofa on the occasion of his entering and quitting the apartment. It was but a few steps from the door to the sofa, and these few steps she contrived to make without betraying lameness, or any awkwardness that could lead to the suspicion of the existence of deformity. The history of this case, as commented upon by Dr. Lee, would lead the fellows to suppose that he (Mr. W.) had frequent opportunities of seeing his patient when in bed; but this opportunity was, in reality, never afforded him. He repeatedly desired her to do this, stating his anxiety to examine the heart, and on one or two occasions, after very urgent persuasion, she did promise to remain in bed—but she never did so; if he appointed to be with her at any particular time, and was there accordingly, he invariably found her up on his arrival. She had always an excuse for not complying with his request: she was an extremely sensitive person, and what is more, it was with extreme difficulty he could elicit anything respecting the nature of her previous ailments. The husband never made a remark tending in any way to excite a suspicion of this malformation. Dr. Robert Lee, in describing the symptoms, mentioned violent pain in the chest, extending to the back, and down the loins; it was a perfectly erroneous description of his patient's symptoms; there was nothing that could possibly have induced any practitioner to suspect pelvic disease.

Dr. Ashwell began by remarking, that it was easy to understand how men enthusiastically devoted to the pursuits of a profession, should occasionally express themselves with the appearance of something like personality, when, in fact, after the excitement of the discussion was over, nothing of the kind was really intended. Still, it must not be forgotten, that by energetic collisions of this nature, truth was elicited; and he (Dr. Ashwell) doubted not that the members of the Society who have entered the most warmly into the question now before it, would with great pleasure most impartially accord to Dr. Lee his full measure of praise, if ever he shall again announce and establish other discoveries as illustrious as his demonstration of the uterine nerves. But, said Dr. Ashwell, the question now in debate is a most important one, being no less than the determination of the worth and desirableness of the Caesarian section. Although agreeing in a great deal that Dr. Murphy had said, he still thought the operation was most undesirable, and, like all the operations of abdominal obstetric surgery, all but uniformly fatal. In reference to the case brought forward by his friend, Dr. Oldham, he did wish that he had persevered for a longer period in his attempts to deliver by embryotomy, before resorting to the Caesarian section. Still, in saying this, he was quite aware that he might be met by the infelicitous result of his own case, which had been quoted by Dr. Oldham, and in the management of which he had enjoyed all the facilities and appliances which Guy's Hospital so richly afforded. It was true that he (Dr. Ashwell) had intimated in that case, that if he had seen the patient earlier, the Caesarian section might have been properly resorted to, although it ought to have been stated that, in juxta-position with that remark, he had emphatically said, that premature labour artificially induced was the appropriate measure in such cases. Still, he was quite aware how difficult, and, in some instances, how insuperably difficult, was either craniotomy or the breaking-up of the child. This fact (said Dr. Ashwell) ought not to be concealed; for no one, except he has himself had the management of such formidable cases, can form an adequate idea of the obstacles to be overcome. But then, with this admission, he still said, that in almost every instance this dreadful operation should be negatived. The cases adduced showed how few, how very few, recovered, and this brought him to the conclusion, that premature labour, and where this had been neglected, *craniotomy and the dismemberment of the child*, with all their difficulty and delay, were far preferable to delivery by the Caesarian section. Certainly, in these unhappy cases, where there was a suspicion that the pelvis was deformed, whether from mollities, or independently of this destructive malady, it was the great duty of the accoucheur to examine as early and as accurately as possible, that the membranes might be punctured,

and labour induced at as early a period as the degree of deformity rendered necessary.

Dr. Tyler Smith thought it should have occurred, in all fairness, to Dr. Murphy, that by far the greater number of the 107 craniotomy cases must have been the cases of other medical practitioners, to which Dr. Lee was called at the last extremity, and in which, therefore, no question of the induction of premature labour could have been entertained by Dr. Lee. With respect to the case at Cupar, it must be considered as one in which nature performed the operation of premature labour by rendering the placenta unfit to support the child. In the case related by Dr. Oldham, it appeared to him a matter of regret that the child was not destroyed at the earliest possible moment, or that after it was destroyed, time was not allowed to elapse before the efforts at extraction, so as to allow of putrefaction and softening of the child. On hearing Dr. West's paper, it had seemed to him a great misfortune that no reference had been made to the induction of abortion, and no regret expressed that the time for this operation had passed without the detection of the pelvic deformity. If that regret had been expressed, the operation for the induction of premature delivery, and the Cæsarian section would not have come before the Society in such violent concussion. It was to be regretted that the attempt to perform craniotomy was not made, particularly as Dr. Ramsbotham leaned to this in the first instance. In these cases of osseous deposit, it was exceedingly difficult to estimate the amount and density of the bony matter in the pelvis. In some cases on record it had been found that the bony structure had readily broken down, and in such cases it seemed impossible to say, without a trial, that craniotomy and extraction might not be performed. Dr. West, in the few observations he had made at the close of the last meeting, had said that the importance of the induction of premature labour, so ably detailed by Dr. Lee, was fully recognised by the teachers of midwifery in this country. He begged to differ from this opinion. Dr. Lee had referred to the induction of premature labour, and also to the induction of abortion, when the life of the fetus was necessarily to be sacrificed. Dr. West's observations could only refer to induction of premature labour, at a time when the child was viable. Dr. West had himself recently published an elaborate and able paper, on the fluctuations of opinion which had occurred, respecting the operation of turning and the use of the forceps, in cases of distortion. It was remarkable that in his paper, no reference was made to the induction of premature labour, a more important operation than either, coming between them, belonging, it might be said, to England, and without a due consideration of which turning and the forceps could not possibly be discussed. Dr. Rigby, who had been concerned in the treatment of one of the cases brought prominently before the Society, though in his *System of Midwifery*, he had devoted an important chapter to the induction of premature labour, had not, he believed, said one word respecting the induction of abortion, in cases of great distortion. Dr. Murphy also in his work on difficult parturition, had only noticed the induction in a cursory manner, and as a means of saving the life of the child. These facts seemed to show that the induction of premature labour, and particularly the induction of abortion, had not received sufficient attention. Dr. Lee had on one person operated twelve times, and the mother and many of the children were now living. In other cases the ovum had been destroyed many times in succession in order to rescue the life of the mother. Some persons entertained doubts of the morality of inducing abortion repeatedly in the same person. Denman had originated this doubt; but it had not been developed until, in the present day, there were some teachers of midwifery who declared that the operation should only be performed once, and that, afterwards, the mother should be left to take her chance of the Cæsarian operation. This was assuming the position of supreme judge: as well might we refuse to treat syphilis more than once. Such a dogma was most monstrous. It was both absurd and immoral to put the life of an ovum of four or five months, dependent from day to day for its existence upon any accident occurring to the parent, in serious competition with the life of a mature and educated woman. He trusted one result of the present discussion would be, to give it a more just prominence. Dr. West had said, that in a similar case he would repeat the Cæsarian operation; but he trusted that before the publication of his paper in the *Transactions* of the Society, some reference would be made to the all-important relations of premature labour and abortion in such cases.

Mr. Skey would not occupy their time long, but his name having been involved in two interesting cases of Cæsarian section which had been brought before the Society, he deemed it right he should stand up and defend himself from the charge of rashness. For

Dr. West's case, Dr. West was there to answer for himself. He (Mr. Skey) was in no equivocal position with regard to that. When called in, as a surgeon, to perform the Cæsarian section on a person declared to be unable to part with her child, *per vias naturales*, he did not go blindfold, but consulted others, and he had the opinions of Dr. West, Dr. Ramsbotham, Dr. Murphy, and Mr. Wren, and they all declared that the operation was necessary. He therefore hoped that he was clear from the charge of rashness in that case. The patient at St. Bartholomew's was not under Dr. Rigby's care; he himself was responsible for that. The woman was admitted into the hospital in the seventh month of her pregnancy. What was he to do? Was he to undertake the management of this obstetric case when he knew nothing of midwifery? He (Mr. Skey) called in Dr. Rigby, Dr. P. Smith, Dr. Fergusson, and Dr. Locock—every one, in fact, eminent in midwifery, except his friend over the way (Dr. Lee). He had also the benefit of the opinions of certain other eminent physicians—he begged the physicians' pardon, he meant general practitioners (hisses)—who he thought in this respect were as good as physicians, for they made the subject their especial study. The opinion of them all was, that the case was too far advanced for the induction of premature labour; and the only question was, whether the Cæsarian section should be performed, before the patient reached the full term of her pregnancy. That question was decided in the negative, because to anticipate the natural period of labour, would increase the danger. When the ninth month arrived, the operation was done. The responsibility of the case was his own, but still he was to a great extent a creature in the hands of the obstetric physicians he consulted.

Mr. Skey then exhibited the pelvis of his diseased patient, exclaiming somewhat theatrically, "Here is the monster! Look at that!! Was there ever such a diameter? A diameter of an inch and an eighth?" He then enquired of Dr. Lee, if he would recommend the induction of premature labour in such a case as that; he himself had never before heard of such a pelvis. He had heard of pelves, the diameter of which was an inch and a half or two inches, and these were described as very unfortunate cases, but here the diameter was only one inch and an eighth. He hoped that, under these circumstances, he should be acquitted of having performed an unnecessary operation.

Dr. Lee, after having examined the pelvis, which had been described by Mr. Skey as a monster, observed that it was not so much distorted as one in the museum at St. George's. He was surprised that it should have been represented as being so much distorted, as to render the Cæsarian section requisite. The outlet was not in the least distorted, and it was perfectly possible for craniotomy to have been successfully performed. If, however, premature labour had been induced when the poor woman was taken into St. Bartholomew's, the perforator and crotchet would readily and easily have completed the delivery. He (Dr. Lee) could not admit Mr. Skey's responsibility in this case; he knew nothing of midwifery—he was a surgeon, and he (Dr. Lee) understood that he had performed the operation perfectly well. He did not know whose was the responsibility, but why was not premature labour induced at the sixth or seventh month, when her pregnancy was ascertained, and also the existence of great distortion. Instead of that operation, the Cæsarian section was determined on. The poor woman, admitted into the hospital in November, remained there all that month, through December, and through January to the 26th, when the operation was done; and he (Dr. Lee) would ask Mr. Skey why all that time was allowed to pass away without the induction of premature labour? Dr. Lee then exhibited the pelvis from the museum at St. George's, which, he said, was much more distorted than that shown by Mr. Skey, and yet the woman was twice delivered at the full time, and premature labour was induced on three occasions afterwards. The case is fully detailed in his (Dr. Lee's) '*Clinical Midwifery*.' In 1820, he was called to deliver the patient, who had been forty-eight hours in labour at the full period, under the care of a midwife. The woman was a native of Manchester; more than three hours were spent in dragging the smaller bones of the head through the pelvis; she had suffered much from pain about the ilia and sacrum during pregnancy, and had been unable to walk. He (Dr. Lee) recommended the patient to have premature labour induced, if ever she became pregnant again; but the advice was not taken, and in 1832, the late Dr. John Prout was called to this patient when in labour at the full period. From the distorted state of the pelvis, Dr. Prout found it impossible to reach the os uteri with the finger, and thought delivery could never be accomplished but by the Cæsarian operation. The pains being weak and irregular, and no necessity for immediate delivery, Dr. Lee advised delay. About twenty-four hours after the commencement of labour, Dr. Golding and himself saw the

case with Dr. Prout, and then the orifice of the uterus was found to be considerably dilated, the head presenting. It was resolved to perforate the head, to remove the brain, and leave the case for a time to nature. Fourteen hours after, Dr. Golding passed up the crochet between the uterus and head, and fixing its point in one of the orbits, succeeded in dragging the head through the pelvis. The patient recovered, as she did in 1820, without a bad symptom. In the month of June, 1833, premature labour, or abortion, was induced in the fifth month of pregnancy by perforating the membranes. The foetus was expelled eight days after, without any artificial assistance, and she recovered in the most favourable manner. On the 12th February, 1835, premature labour was again induced at the commencement of the seventh month of pregnancy. The foetus was expelled, but its head was squeezed so as to be quite flat on the sides. On the 19th January, 1836, when the same patient was at the end of the sixth month of pregnancy, Dr. Lee endeavoured to induce premature labour, by puncturing the membranes. He could not succeed, and this partly in consequence of the forefinger of the left hand being, at the time, nearly deprived of sensation and the power of motion, from a dissection wound, followed by deep-seated inflammation of the joints. The effects of the ergot of rye were tried without effect. On the 14th of March another attempt was made to perforate the membranes with Mr. Holmes' instrument, but this did not succeed in consequence of the instrument not being sufficiently curved. Dr. Lee had a probe-pointed stiletted catheter constructed, and with this, on the 24th of March, he at once succeeded in drawing off the liquor amnii. The presentation was, unfortunately, preternatural, and great difficulty attended the extraction of the child; the patient subsequently died. Had the head presented, Dr. Lee had no doubt that the labour would have been accomplished with perfect safety to the mother. He (Dr. Lee) had received a letter lately from Dr. Collins, confirming the practice he advocated. Neither Dr. Collins nor Dr. J. Clarke had ever met with a case in which the Cæsarian section was necessary. He had been informed that during his absence in the early part of the evening, Dr. Murphy had alluded to the number of cases of craniotomy, 127, recorded in his 'Clinical Midwifery,' and had inquired why he had not induced premature labour, instead of performing that operation? In the greater number of these cases, there was not any distortion of the pelvis; in four of the cases the foetus was hydrocephalic, and in some others the uterus was ruptured before craniotomy was employed. He (Dr. Lee) had never omitted inducing premature labour, when it was rendered advisable by distortion of the pelvis; and he believed that no pelvis was so distorted as to render it impossible to reach the os uteri, and then induce premature labour. In cases of great distortion, abortion should be caused about the middle of pregnancy, or at the sixth month; in slighter cases it might be induced at the seventh, without difficulty or danger.

Dr. Webster rose, but the President, considering the hour ($\frac{1}{4}$ to 11 p.m.) too late to hear another speaker, called upon Dr. West to reply.*

Dr. West had not in his paper referred to any cases more

* Dr. Webster having kindly furnished us with notes of the interesting case he purposed describing to the society, we subjoin it. "Owing to the lateness of the hour, or perhaps from unwillingness of the meeting to listen to any other Fellow, excepting the authors of the two papers, Dr. Webster, after having risen to address the President, was unable to mention an interesting case bearing upon the subject under debate, and in which the Cæsarian section, like the instance at Cupar in Fife, quoted by Dr. Lee, was to have been performed, had it not previously terminated in a somewhat similar manner. He was, he says, the more anxious to narrate the chief particulars of the case, seeing that a stronger propensity than formerly now prevails, whether in surgery or midwifery, to have recourse to operations, more especially since chloroform has been employed to produce insensibility. The case may be thus related. Many years ago, when Sir Charles Bell filled the office of Surgeon to the Middlesex Hospital, and Mr. Sweatman that of House Surgeon, a woman was admitted a patient suffering from some apparently serious disease. On examination, it appeared that she was in labour, and had a deformed pelvis. After a consultation of several distinguished accoucheurs and medical practitioners, called to give their opinion respecting the case, and the measures proper to be adopted under existing circumstances, it was resolved by a majority of those present, that the deformity of the pelvis was too great to admit of delivery by craniotomy, and that the Cæsarian section should be had recourse to, notwithstanding a minority of the gentlemen consulted were of opinion delivery might be effected by craniotomy. It was thus decided, that the Cæsarian operation should be performed, Sir Charles Bell being appointed to perform it in an hour afterwards, and preparations were made accordingly. However, labour pains having supervened in the interval, the patient was delivered, before the expiration of the hour, by the efforts of nature, so that artificial interference became wholly unnecessary, and she ultimately recovered. Dr. Sweatman and Mr. North, when lecturing on Midwifery, at the Middlesex Hospital, often alluded to this most important and instructive case, for the purpose of impressing upon the minds of their pupils, how very difficult it is to determine positively the exact admeasurement of the pelvis, in cases of deformity; or, in other words to decide when delivery may be effected by craniotomy, or when the Cæsarian section offers the only possible chance of escape to the mother. Such was also Dr. Webster's opinion, and he would have said so at the Society, but was prevented, as already mentioned."

ancient than 1750, with the exception of that of Mary Donnelly. She was delivered by incision of the abdominal parietes, and when seen a few days afterwards, the wound was nearly closed. The child's arm was protruded into the vagina, so that if it were not a case of Cæsarian section, it was one of ruptured uterus and gastrotomy, recovery from which would be still more extraordinary than from the Cæsarian section. He held too, that the evidence in Mr. Barlow's case was quite sufficient. Since 1821 there have been four successful cases of Cæsarian section in these kingdoms, not noticed by Dr. Lee, and another by Mr. Whitehead, of Manchester, might be added. The patient survived to the thirty-second day, and then died from the malaco-ton, which continued to make progress. These facts show that the operation is not quite so fatal as Dr. Lee represents it. Some of the cases operated on, on the continent, have terminated successfully, and he (Dr. West) saw no reason why they should be rejected from the list. Dr. Tyler Smith had expressed his regret that craniotomy had not been performed in his case. In determining the propriety of selecting either the Cæsarian section or craniotomy in such cases, the difficulties connected, not only with the contracted inlet, but also with the contracted outlet, must be considered. Craniotomy could not be practised when the outlet is so much contracted that the hand cannot be introduced, so as to guard the soft parts against the cutting instruments. Dr. Tyler Smith had further expressed a wish that he (Dr. West) should have alluded to inducing abortion, in his paper on the use of the long forceps in turning. He had not mentioned that proceeding, simply because it was foreign to the subject-matter of his paper. Dr. West then complained that, in the report of the previous meeting in one of the Medical Journals, words had been put into his mouth which he had never used, and the strong language employed by Dr. Lee had been added to, and made even more personal than it was in the actual delivery. He complained especially, of the word "abomination" applied in the reported speech by Dr. Lee to the Cæsarian section, and denied that it had been used by that gentleman.

Dr. Lee remarked, that he certainly had made use of that expression, nor would he recal it. He did consider the Cæsarian section to be an "abomination."

The President suggested that Dr. Lee did not mean to use the word in an offensive sense to his professional brethren, and in that suggestion Dr. Lee at once concurred.

Dr. Oldham replied briefly to the remarks of Dr. Ashwell and Dr. Tyler Smith. He thought if he had continued his attempts to induce delivery longer, the time for the Cæsarian section would have gone by, and the patient would have died undelivered. He threw out a suggestion whether, in Dr. Ashwell's case, already alluded to during the meeting, the Cæsarian section, performed early, might not have been productive of benefit.

MEDICAL SOCIETY OF LONDON.

February 8th, 1851.

DR. BENNETT, President, in the Chair.

THE CAUSES OF GONORRHOEA.

Mr. Chippendale read a paper on Gonorrhœa. He commenced by remarking, that those who, for any lengthened period, have enjoyed the inestimable benefit of an extended field of observation, and who have duly availed themselves of so great an advantage, are aware that there are many diseases, concerning the origin and propagation of which they have occasionally a difficulty in reconciling the facts which come under their notice with the commonly received opinions. Among these diseases the author classes gonorrhœa. The results of civil practice, he observes, are not of a nature to enable one to arrive at accurate conclusions, and it is only from the military practice in small towns on the Continent, where all the inhabitants are known to each other, that satisfactory inquiries can be pursued. Such an advantage the author had formerly possessed, and the conclusion he has drawn is, that gonorrhœa for the most part, is not, as is commonly supposed, contracted by infection. In illustration of this position, he describes the occurrence of gonorrhœa, after protracted intercourse, following a debauch, the victim using cold ablutions to the part to prevent infection. This he regards as a case of mucous membrane highly excited, and suddenly submitted to a depressing agent, which would naturally induce inflammation and a muco-purulent secretion, with all the attendant symptoms of gonorrhœa. As a counterpart to this, Mr. Chippendale next described the occurrence of a cold in the head, caught by exposure to a draught of cold air while heated. He says:—We have here two cases so far parallel as the dissimilarity

of the organs affected will admit, in which we have a like disturbance set up by causes which are similar, though not identical. The author then sought to prove the spontaneous origin of gonorrhœa, by stating, that in numerous cases of that disease among the French soldiery, the women with whom they had connexion were found, on examination, to be free from disease. Two cases were also given of married men, who, after drinking too much wine, and having protracted intercourse with their wives, had gonorrhœa. One of these cases, the author said, was fraught with suspicion, for the patient had had connexion with another woman about a week previously. With the other nothing of the kind had occurred. To these Mr. Chippendale added the case of a lad, about sixteen years of age, suffering from gonorrhœa, caused by onanism; and that of a boy in whom the same disease was produced by passing the head of a pin down the urethra. Another case of gonorrhœa happened in a child five years old, but the cause could not be discovered. The author next expressed his surprise that the virus could be effectually lodged in the urethra, because during connexion that canal is closed by pressure, while the lubricating secretion of its mucous membrane serves to defend it from noxious agencies, and the completion of the sexual act is of such a nature as to cleanse away all adventitious matter from the canal. Again, the author doubts the lacuna magna being the seat of the disease, and thinks it not improbable that there is frequently, although not always, an ulcer in that situation. He next proceeds to examine the alleged causes for orchitis and ophthalmia, and, discarding them, regards gonorrhœa as of a rheumatic character, and those sequences of the disease as instances of genuine metastasis; and, to strengthen this opinion, cites the occasional occurrence of gonorrhœal rheumatism. With respect to treatment, copaiba and cubebs he considers to act through the blood, and they must be given at the commencement of the attack, or else they are of no avail. The author has observed that the disease lasts the longest in the young, and that the period of its existence, other things being equal, diminishes as individuals advance in life.

Mr. Acton, after ascertaining that the women with whom the soldiers had had intercourse, and who were said to be uninfected, had not been examined with the speculum, said that no reliance could be placed on their actual freedom from the disease. He did not believe in the spontaneous origin of gonorrhœa; it might, however, be caused by excessive intercourse with a woman affected with leucorrhœa. The question had been put, how did the pus enter the urethra? He thought that when the semen was forcibly discharged, a vacuum was formed, and the pus passed in. He believed that cubebs, &c., acted locally, and not on the blood, and related a case in which a man, with hypospadias through which the water passed, was cured of a discharge up to that point by cubebs; but the disease continued from this point to the termination of the urethra. Antiphlogistic remedies alone would not effect a cure in one case out of ten. If, however, there be severe inflammation, they must be had recourse to.

Mr. H. Wakley treated his cases with an injection of the chloride of copper, one, two, or three grains to the ounce, and with great benefit.

Dr. Winslow mentioned the case of a lad who had a severe attack of gonorrhœa from onanism.

Mr. Chippendale having replied, the meeting adjourned.

February 15th, 1851.

Dr. BENNETT, President, in the Chair.

NEW MUSCLES OF THE URETHRA.

Mr. Hancock read the following paper:—A great deal has been said and written upon the subject of spasmodic stricture and strictures in general, but I am not aware of any one having hitherto satisfactorily accounted for the several phenomena displayed in the various forms of impediments to the passage of urine, which are usually described as spasmodic stricture. Some have ascribed them to inflammation, others to engorgement of the network of vessels surrounding the prostate; others, and the larger number, to morbid and irregular contraction of the muscles surrounding the membranous portion of the urethra, viz., Wilson's, Guthrie's, and Santorini's muscles, together with that usually denominated the "accelerator urinæ muscle." I have always considered these explanations unsatisfactory, and totally inadequate to account for the difficulties I have encountered in the treatment of urethral diseases. I have been unable to understand how voluntary muscles should continue in forced and excessive action so long as spasmodic retention of urine has been known to exist. I have been unable to account for the muscles just named causing spasmodic closure at parts of the urethra which they do not invest. I could not ac-

count for the almost complete retention of urine in cases where no impediment was presented to the passage of instruments of large size; neither, by the reasons usually assigned, could I account for the sudden contractions of the urethra so frequently met with, and which could only be ascribed to the more general presence of muscular stricture than has hitherto been considered to obtain in these parts. Assisted by my friend, Mr. Hogg, to whom I am greatly indebted, I have lately paid great attention to this subject; and I beg to submit to the Society the result of our investigations. Sir E. Home, and various other surgeons have described the urethra as muscular; but in this they were in error. The urethra itself consists of mucous membrane, lined by its epithelial scales, but it is closely invested by muscular fibres of organic structure, similar to, and in fact continuous with, the muscular coat of the bladder. The muscular coat of the bladder appears to me to consist of two layers of involuntary muscular fibres, an internal and an external; the external, partly covered by peritoneum, passes forwards, and extends over the outside of the prostate gland; the internal, on the contrary, separated from the mucous lining of the bladder by cellular tissue, accompanies the mucous lining when it becomes urethra, through the prostate gland, forming an involuntary muscular covering to the urethra in its passage through the gland. The membranous portion of the urethra is next closely invested by a continuation of these muscular fibres, which cannot be mistaken for any portion of Wilson's, Guthrie's, or Santorini's muscles, as the latter are voluntary, and present the usual striated appearance when viewed by the microscope, whilst the former are strictly involuntary and nucleated. Conducted forwards upon the membranous portion, they reach the bulb, and here they divide into two portions, a superior and an inferior; the superior continues onward to the orifice of the urethra, lying between the urethra and corpus spongiosum; the inferior passes on the outer surface of the corpus spongiosum, separating it from its fibrous investment, to which the fibres adhere pretty closely; these latter are also continued forward to the orifice of the urethra, and in their course they invest the spongy portion of the bulb; the urethra and the glans penis entering very largely into the formation of that peculiar structure found at the orifice of the urethra, and which appears to consist almost entirely of involuntary muscle and elastic cellular tissue, constituting an additional sphincter muscle to those already described as existing in various parts of the body. It will thus be seen, that the corpus spongiosum urethræ lies between two layers of involuntary muscle, the one separating it from the urethra, the other from its fibrous covering, an arrangement, doubtless, exerting great influence upon the expulsion of the blood from the spongy tissue, when erection of the organ is no longer required, as well as upon the acceleration of the passage of the urine along the urethra; and I am doubtful whether the hitherto named "accelerator urinæ muscle" may not with more propriety be considered a depressor penis, or a direct opponent to the erectores penis. I have thought it right to make this short communication to the Society, as the now proved existence of a muscular and continuous muscular coat to the very orifice of the urethra may tend, in a great measure, to explain the anomalies met with in the various cases of stricture, and may also be the means of introducing an improved means of treatment. I am still continuing the investigation of this subject; and, should the Society desire it, I shall be happy to bring it forward in a more detailed form at some future period.

Dr. Ogier Ward inquired of Mr. Hancock whether the muscular fibre had been examined under the microscope, and its identity with involuntary muscular fibre established?

Mr. Hancock replied in the affirmative, and added that Mr. Hogg would bring down the specimens, which he would have much pleasure in exhibiting to the meeting.

FIBROUS TUMOUR OF THE UTERUS.

Dr. Robert Barnes exhibited the uterus of an aged woman, taken to the Hunterian dissecting room. The uterus presented a fibrous tumour, the size of a marble, attached to the orifice of each Fallopian tube. One of the tumours had been cut away when the uterus was rescued by Mr. Chance. Dr. Barnes read a report from Dr. Hassall relative to the minute structure of the remaining tumour. Dr. Hassall stated, that he could detect no difference between its structure and that of the walls of the uterus; he therefore concluded it to be fibro-muscular. Dr. Hassall remarked, that tumours of epithelium, bone, cartilage, &c., were met with, and he could see no reason why muscular tumours might not also be observed.

Dr. Murphy, remarking that the tumours were said to have been in the neighbourhood of the Fallopian tubes, asked if they so pressed on the tubes as to cause their obliteration?

Dr. Barnes replied that he thought it was impossible to pass anything through the tubes.

DISEASE OF THE SEMILUNAR VALVES OF THE AORTA.

Mr. Leonard produced a specimen of congenital malformation of the valves of the aorta. The subject was a fine muscular young man, aged 28 years. He had no previous illness, and had never applied for medical aid. He went to bed apparently in good health, and died suddenly. The heart was greatly enlarged and very muscular; there were but *two* valves to the aorta, that next the right auricle being the larger, as if two had become one; they were much thickened and altered in structure, and totally unfit for service. The aorta above the valves was dilated to about twice its natural diameter, gradually diminishing till, at the innominate, it assumed its natural size.

Mr. Canton inquired whether the head had been examined, as, in a man of such build, and with a heart so diseased, it was very probable that death was caused by apoplexy?

Mr. Leonard said the head had not been examined.

Dr. T. Thompson drew attention to the fact that the disease seemed to have manifested a preference for the two valves of the aorta which were anatomically in an abnormal state. This confirmed the statements of Meckel and others, that when the valves are either too many or too few in number, disease, when it occurs, attacks them in preference.

Mr. Canton wished to learn from Mr. Marson the condition of the aortic valves, in a specimen exhibited by him some time back, to the Society, in which there were only two valves. He had noticed this peculiarity in several instances, but had never seen them in a diseased condition, similar to that exhibited by Mr. Leonard.

Mr. Marson said, there was some degree of cartilaginous hardness in each valve.

A Fellow drew attention to the contracted state of the pulmonary artery, and to the increased thickness of the heart's parietes. He thought it weighed, at least, twenty ounces.

THE CAUSES OF PHTHISIS.

Dr. Theophilus Thompson read a paper entitled "Hints on some relations of Morals and Medicine, with special reference to Pulmonary Consumption." The author commenced with some remarks on the principal causes of consumption. 1st. Hereditary influence. This, he observed, could be traced in a considerable proportion of cases,—full a fourth of the patients whom he had questioned having lost a parent from the disease. It was worthy of notice, that this influence is more obvious in women than in men, and seems peculiarly to extend itself in the sex with which, in any given family, it first originated. 2ndly. Contaminated air. This influence is remarkably exhibited in tailors, journeymen bakers, and printers. Tailors have been found to constitute 7·2 of the patients at the Hospital for Consumption. They are, however, very liable to other diseases, constituting 5·8 per cent. at a general hospital. Thirteen per cent. is a high morbidity for a class probably composing only a fortieth part of the male population of the metropolis. We cannot wonder, that, of journeymen bakers, probably a fourth have consumptive symptoms, when we reflect that they often work for twenty hours at a time, having gas instead of sunshine, and gusts of flour dust instead of fresh air. The printers in this metropolis are probably a third as numerous as tailors; but at the Hospital for Consumption they are more than half the tailors' per centage. Dr. Thompson corroborated an interesting fact deduced from the meritorious investigations of Dr. Guy, namely, that pressmen are less frequently consumptive than compositors, probably owing to the tendency of exercise in some degree to counteract the bad effect of confined air. 3rd. Dissipation. The author had continually witnessed the tendency of syphilis and courses of mercury to induce phthisis. The peculiar liability of soldiers to consumption (whilst sailors are comparatively exempt) he was inclined to think with Dr. Duncan, (in a valuable communication in the *Dublin Medical Journal*, vols. 8 and 9), was in a great degree attributable to the "listlessness of their lives, and the dull monotony of drills and parades." This observation led the author to the special object of his paper, namely—4. The influence of mental depression. He argued that the breathing was materially affected by mental emotions, and that anything which retarded the breathing tended to induce pulmonary congestion, and thus to promote tubercular deposition, in subjects predisposed by impaired nutrition, however produced. Mental causes were the only satisfactory explanation of the fact, that the inmates of prisons in this country, and in America, under every variety of climate and regimen, were more prone to consumption than the general population; the disease, as shown by Dr. Baly, manifesting itself in a high degree during the third year of confine-

ment. The marked diminution of liability of married women, above the age of 25, as compared with men under similar circumstances, the author attributed mainly to the fact, that man is harassed with struggles for the support of his family; but that woman, with more faith and patience, does not so anxiously regard the morrow. Viewed in connexion with this fact, Dr. Thompson called particular attention to the remarkable circumstance, that in London and the provincial cities, with the exception of Leeds, the mortality of females from consumption is much less than that of males, but that in the country population the reverse is observable; and argued, that the differences of the condition of the sexes in these two divisions must be more moral than physical. He suggested, that the proportion of children born out of wedlock would supply some aid in estimating the moral disquietude of the female population; and in arranging the per centage of deaths from phthisis, derived from the returns of the Registrar-General, for some of the principal cities, the correspondence of female mortality, in reference to the mortality of men, with the per centage of illegitimate children, as obtained from the same documents, is remarkable.

Per Centage of Deaths from Phthisis to every 100,000 of Population.

	Men.	Women.	Proportion of illegitimate children to children born.
London	455	377	3·2
Liverpool and West Derby..	595	571	3·6
Manchester and Salford ...	549	548	5·8
Leeds	440	477	6·0
England and Wales	378	408	7·0
Paris	208	408	28·0

Amongst the practical deductions of the Essay were—1st. That certain simple measures easily available, chiefly in the way of ventilation, as applied to our workshops, might probably reduce the mortality of our artisans in this metropolis by at least a thousand a year. 2ndly. That muscular exercise in the open air is of great importance, especially for men when threatened with consumption; but that women require more shelter, and bear more confinement. 3rdly. That cheerful impressions have a remedial influence, and that, under circumstances of intense study or anxious care, it is very important, from time to time, systematically to practise breathing. 4thly. That education may accomplish much for the promotion of health by teaching a correct estimate of power, restraining ambition, and training to equanimity of mind and to exhilarating habits of usefulness.

Dr. J. B. Thompson observed, that Dr. T. Thompson had omitted to notice one cause of consumption, viz., the employment of impure, vitiated lymph, which he had found in the East and in the colonies to be a not unfrequent cause of tubercular disease. Tubercular complaints were unknown among savages, until the use of this impure lymph for vaccination had been introduced. It also caused another complaint, muscular atrophy, and, he believed, had in some instances been the means of introducing syphilis into the system.

Dr. Lankester thought the remarks just made were very novel, and of great importance; but evidence was wanting to substantiate the possibility of the introduction into the system, by vaccination, of so destructive a malady as tubercular disease. Full evidence should be given, or the statement should be rejected: as if it were to go forth from that Society, that such a result might attend vaccination, it would tend much to strengthen the prejudices still entertained against that most useful operation. He trusted that Dr. J. B. Thompson would at some future time bring before the Society full proof of his statement. It is, he thought, the general impression in the profession, that no disease can be introduced into the system, with the specific poison of another malady. Statistics had shown, that phthisis was not so much owing to hereditary causes as had been supposed; in four-fifths of the cases the disease was not hereditary, and the remaining portion even might perhaps be reduced, as the statements of patients at dispensaries as to the diseases of which their relatives died, could not be relied on. The one great cause of tubercular disease was the want of pure air. This had been proved to demonstration. Dr. L. then referred to the occurrence of tubercular disease in monkeys, &c., when deprived of fresh air and light. The tables as to the relative occurrence of phthisis in women, as compared to men so afflicted, were striking, but on a small scale and not sufficient; more evidence is required. They may be a mere coincidence. When we talk of the relation of cause and effect,

the evidence should be sufficient to enable us to decide that the fact in question is not a mere coincidence.

Dr. J. B. Thompson promised to furnish the Society at some future time with the statistics connected with the statement he had made, and also with the records of the experience of some other medical men, whose opinions coincided with his own on that point.

Mr. Dendy explained, that Dr. J. B. Thompson did not mean to imply that vitiated vaccine lymph would directly cause the tubercular diathesis, but that it induced so low a state of system as to render it liable to phthisis. He then remarked, that in his opinion, phthisis is never generated *de novo*, but that there is in all cases a latent germ in the system, which is developed, and excited into action by a depressing cause.

Dr. Snow considered that the greater proportion of cases of phthisis in women than in men, was a mere coincidence, nor could he admit, even were the number of returns much larger, that there was any connexion between the occurrence of phthisis and the bearing of illegitimate children, for in the agricultural parts of the country, where there were more illegitimate children comparatively speaking, consumption was rare. In towns, the condition of the women was much worse, and hence arose the preponderance of cases of phthisis.

Mr. Barlow, after commenting on the influence of mental impressions in producing the disease, and illustrating his remarks by the proneness to it among those who have long and assiduously watched the death-beds of their phthisical relatives, remarked that voluntary exercise of the respiratory organs, in the prevention and cure of consumption, was not sufficiently attended to. In incipient cases, free exercise in the open air, not carried to fatigue, with voluntary exercise of the respiratory organs, and occasional deep inspirations, so as to bring the whole lungs into action, were of great service. The whole system was benefited by it; the lungs especially, as it aided their nutrition, and impeded tubercular deposition. There are many cases in which voluntary respiration is useful, as in poisoning by opium, after a fit of epilepsy, in that interesting disease of infants, called atelectasis, &c.

Dr. Ogier Ward inquired of Dr. Thompson, whether, in his calculation, that by certain sanitary measures, 1,500 lives might be saved annually, he included the cases of children, or only those of the adult tailors, printers, bakers, &c. With respect to the influence of moral and depressing agents, also, he would wish to ask whether the statistics of the disease on the continent were taken into account, as well as those of this country. He (Dr. W.) considered that we are living too fast here; on the continent, when a man has done a good day's work, he amuses himself; while in this country people generally work, either with the head or the hands, sixteen hours daily. With regard to voluntary respiration, the case of soldiers, among whom phthisis is very prevalent, would appear to invalidate the statement, as their drills and manly exercises are such as to give every encouragement to voluntary respiration. Their habits of dissipation induce the disease.

Mr. Fisher inquired of Dr. Thompson, if he possessed any statistics of the disease among shoe-makers. From his experience among the police, he was led to believe that where eight tailors died of phthisis, ten shoe-makers fell victims to it.

Dr. J. R. Bennett confirmed this statement from his own experience. There is a large proportion of cases of true phthisis among shoe-makers. This was found to be the case, at least, in the city of London Hospital for Consumption. The influence of moral causes in creating the disease, was shown among country people, many of whom fell its victims during the first year or year and a half of their residence in London, when they are subjected to the influence of depressing moral agents. The question as to the spontaneous production of phthisis, is of great importance, but not easily settled. Recent observations had tended to throw considerable doubt on the existence of real tubercle in animals deprived of light, fresh air, &c. The hereditary tendency to the disease does not admit of a doubt, inasmuch that life assurance offices will not assure a life, when any of the relatives have died of the disease, or else they exact a very high premium. In such cases if the persons die at an early period of life, it is generally from phthisis. He did not mean to say, however, that persons so situated, might not live to an advanced age.

Dr. Theophilus Thompson, in reply, said that the statements respecting the disease in London, were taken partly from the records at the Marlborough-street Dispensary, in which neighbourhood there were a great many tailors, and partly from the hospital at Brompton. This would explain the apparently greater frequency of consumption among tailors, than among shoe-makers, in his report. These records showed a mortality among shoe-makers of 4 7-10ths, among tailors, of 7 2-10ths. At University College

Hospital, it was found that the same proportion obtained for all diseases among shoe-makers, and of 5 8-10ths for tailors. Tailors therefore, it might be assumed, were more subject to disease generally, than were the other classes in society. Prostitutes are peculiarly prone to consumption, the proportion being for them, as one in eight, and for other women, as one in eighteen.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday,	March	1,	at 8 P.M.
CHEMICAL,	Monday,	do.	3,	at 8 P.M.
EPIDEMIOLOGICAL,	do.	do.	3,	at 8½ P.M.
LINNÆAN,	Tuesday,	do.	4,	at 8 P.M.
PATHOLOGICAL,	do.	do.	4,	at 8 P.M.
ROYAL,	Thursday,	do.	6,	at 8½ P.M.
ROYAL INSTITUTION,	Friday,	do.	7,	at 8 P.M.
MEDICAL,	Saturday,	do.	8,	at 8 P.M.

[The Anniversary.]

THE INSTITUTE MEDICAL JOURNAL.

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THE INSTITUTE.

LONDON, SATURDAY, MARCH 1, 1851.

TO THE PHYSICIANS, SURGEONS, AND APOTHECARIES IN GENERAL PRACTICE THROUGHOUT THE UNITED KINGDOM.

WE address you as General Practitioners—Under whatever title he may practise, it is to the interests of the General Practitioner *de facto* that this Journal is devoted.

Consider your position as General Practitioners. If, in England, you are Physicians, and practise generally, on the broad basis that medicine and surgery are one science—no matter what your acquirements and talents—you are repudiated by the College of Physicians. You can hold no honourable position in that College. As a corporate body the College of Physicians will have nothing to do with you. Few in number, but of immense influence in the higher circles of society, the privileged Physicians hold you at arm's length, and, as far as their influence extends, by word and deed convey the impression to the public mind, that you are an inferior order of practitioners, and less worthy than themselves of the public confidence. If you are Surgeons, and practise generally, that is to say, if you satisfy the requirements of the public under all circumstances, prescribing and dispensing medicines, performing surgical and obstetrical operations, meeting the exigencies of practice in every emergency, as the great bulk of the profession are compelled to do, not only in this country, but on land and water over the surface of the whole globe, then, you are repudiated by the College of Surgeons, you are deemed unworthy of any honourable distinction, you constitute an inferior order or *membership* of that College; or if, as an exceptional case, you find an entrance into the superior order or *Fellowship*, you are regarded as a mongrel amongst the fellows of purer blood. Lastly, if you are apothecaries, holding the position of general practitioners, after an adequate education and tests by examination legally performing the duties of general practice, no matter what your learning, how skilful and successful your practice, how great your reputation, you are treated still more contemptuously, and the public, as far as the influence of those who hold the highest nominal positions in the profession can extend, are taught to regard you as out of the pale of the legitimate profession; the public are

stealthily advised that you are *Apothecaries*, which is but a designation for *tradesmen*; and homoeopaths, hydropathists, mesmerists, and charlatans, if they only practise physic "legitimately," which word is rendered by both these Colleges "purely," are deemed more worthy than yourselves. Notwithstanding this, the Physicians, Surgeons, and Apothecaries, practising generally throughout the land, constitute the profession at large.

As General Practitioners you have no head or home except that which you have voluntarily established for yourselves. In the communications between the Government and the Profession, the representatives of the College of Physicians are bound by their duty and by their oaths to regard you as aliens and strangers, and to adhere strictly to the interests of their ancient institution. The representatives of the College of Surgeons are bound by their duty and their oaths to maintain the interest of Surgeons, purely considered, which is literally the interest of the *Fellowship*; as members of the College of Surgeons you can have no weight whatever with the Government, because the College still sustains the fiction of representing the interest of its members, and no Government can acknowledge two parties as representing one and the same interest. Those who represent the Society of Apothecaries are bound to limit their views to medicine, in contradistinction to surgery, and to leave untouched the whole subject of the education of its members in surgery, and their practice as surgeons. As obstetricians, none of the existing institutions recognize you or represent you in the face of the Government.

Look at the existing anomalies. Look at the difficulties and intricacies which beset the Government when it attempts to deal with these anomalies. Let the question be seriously put—What is the remedy for this state of things? Upon various occasions when the Government attempted to legislate for the Profession, it naturally inferred that the College of Physicians, the College of Surgeons, and the Apothecaries' Society, constituted the Profession; but it no sooner took a step in advance, than it found itself woefully mistaken. These institutions were seen neither singly nor collectively to represent the Profession; and this is the reason that, hitherto, no Government has been able to effect any amelioration of the laws by which we are governed.

There is but one remedy for the social evils which afflict the community, and arise out of the present anomalous state of the Profession. That remedy is the establishment of a New and Independent ROYAL INSTITUTE OR COLLEGE OF MEDICINE, SURGERY, AND MIDWIFERY. An Institute or College which shall receive within its pale all the General Practitioners of the present day, and provide for the full and efficient General and Professional Education of those who seek to practise as such in future; which shall regulate the general Practice of Medicine; shall have power to prevent encroachments upon the duties of the Profession by the illiterate and unqualified, and to encourage and reward the cultivation of the Science of Medicine, and the collateral branches of knowledge by its members; shall provide a representative head and an official staff, which, as having been placed in their high and honourable position by the suffrages of the Profession at large, would truly represent to the Government the feelings and the opinions of the Profession, and on all occasions might be appealed to with confidence by the Government of the day, upon subjects which concern the General Practitioner, and his relation to the public, and to public hygiene. Any government which would grapple with this subject upon a comprehensive basis, and carry it through, would effect a more lasting benefit upon the nation, than the conqueror in a hundred battles, and would deserve the gratitude of generations yet unborn.

The General Practitioners acted with forethought, discretion, public spirit, and consummate talent in organising themselves into a voluntary association; and in the whole course of their proceedings, as a combined body of so many thousand aggrieved individuals in the case of the National Association of General Practitioners. We have recently re-perused the whole of the documents issued by that body. For judgment, temper, a logical display of all the intricate points at issue and of the true bearings of each, and for a lucid development of so difficult and entangled a question as that of Medical Reform, they are master pieces. The General Practitioners have reason to be proud of the proceedings of this Association, and also of those of the National Institute. The colleges, either from a deficiency of talent or a disinclination to display the truth to the world, have proved themselves

unable or unwilling to explain, either to their own alumni, or to the profession and the world at large—not only the bearings of the medical reform question—but even their own proceedings in relation to that question; they have never issued any documents that will bear the slightest comparison in point of enlightened views and comprehensiveness with those of the General Practitioners. Although the General Practitioners have not obtained their object, they have still, by their voluntary exertions, secured some considerable advantages.

The National Association convinced the Government that it is not dealing with the Profession when it deals with the existing institutions; the National Institute induced the Government to call for representatives of the General Practitioners in the joint conferences between the different classes of the Profession, and the Profession and the Government. And the justice of the cause of the General Practitioners, as set forth by the executives of these Associations, further determined the Government not to take any step in Medical Reform, without making this class in the Profession a party to the proceedings.

This ought to convince the General Practitioners how much more they might effect by union and cordial co-operation. It is a subject of regret, that a few members of the Association—comparatively a very few—dissented from their brethren. As in all such cases a few active individuals are enabled to cause a much greater appearance of dissent than really exists, and when we find, by the reports of the Journals of the day, that in a meeting of a thousand medical practitioners the dissatisfied portion numbered no more than *seventeen*, we are led to the conclusion that, as a body, the General Practitioners appreciate the immense interests at stake, and are virtually unanimous; and it is consolatory that the Association still exists—intact. We trust, when the proper time arrives, that it will resume its meetings, enlarge its boundaries, complete its organization, sink its differences, re-animate its executive, and, following up the advantages it has already obtained, that it will carry to the chambers of Downing-street the convincing argument, that a unanimous feeling pervades the Profession at large, and that it is determined upon a bold, active, unwearied, endless agitation and warfare, until it has accomplished, for the benefit of the people at large, a complete and efficient measure of Medical Reform.

Remember, Gentlemen, that you are not merely the Profession of an aristocracy or of the court, but the Profession of the millions. It is the population at large which suffers from the existing anomalies in the Profession. We appeal to you not only as members of a liberal profession in a false position among the institutions of the country, but as men and Christians, and we call upon you to agitate for Medical Reform as a religious, as well as a social and political duty. In your capacity as General Practitioners of Medicine, the dearest interests of husbands and wives—parents and children—of whole families—rich as well as poor—are confided to you, individually. If you continue apathetic you are amenable for the continuance of the inconsistencies, and anomalies of the laws as they at present stand, and for the direful consequences which, under your own observation, are daily occurring. On the contrary, your union and co-operation in a combined movement, made with energy and perseverance, will, assuredly, at no distant period, secure their correction, and be rewarded with satisfaction and peace in the Profession, and innumerable advantages to the community.

We beg the General Practitioners to bear in mind, that the Medicine and Surgery which they practice are one and the same Science; that, as General Practitioners, they are totally unknown, unrepresented, repudiated, by the existing medical institutions, and, until a very recent period, by the Government of the country; because, educated in the principles of the Science, they practise the art founded upon it in its universal application to the alleviation and cure of diseases, and the amelioration of the mental and physical ills with which their fellow-creatures are afflicted. This preposterous anomaly—this enormous injustice—as respects, not alone its Professors, but the Science of Medicine itself, has called THE INSTITUTE into existence; and if the feelings and opinions of the promoters of this new Journal prevail, the Profession will never rest until it is corrected.

We have the honour to be, Gentlemen, your devoted Servants,

THE PROPRIETORS
AND
EDITORS OF 'THE INSTITUTE.'

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

(Extracted from the 'Paper of Transactions,' dated July, 1845.)

Continued from page 110.

Lanchester, T. W., Yoxford, Suffolk
Land, W. H., Exmouth
Land, W., Exeter
Land, Thomas, Exeter
Lane, S. O., Goudhurst, Kent
Lane, J., Grosmont, Hereford
Lane, G. D., 22, Gt. Russell st., Covent-garden
Lang, W., Bristol, Surgeon to the General Hospital

Langley, H. C., 18, Gwynn's place, Hackney road
Langley, A., Wellington
Langlois, P., St. Hillier's, Jersey
Langmore, J. C., 15, Upper George street, Bryanstone square
Langworthy, W. S., Modbury, Devon
Langworthy, W. F., Modbury, Devon
Lansdown, J. G., Bristol, Surgeon to the General Hospital

Lanyon, R., Lostwithiel
Lanyon, E., Cambourne, Cornwall
Lark, H. R., Kineton, Warwick
Lassalle, W. H., Bristol
Latham, T., Andover
Lattey, A. H. H., Harley street
Lattey, P. P., Harley-street
Lauder, W. P., 8, Sloane street
Laurie, W. F., Dunstable, Bedfordshire
L Davies, J., 34, Great George street, Westminster

- Law, C., 3, Artillery place, Finsbury sq.
 Law, C., jun., 3, Artillery place, Finsbury square
 Lawes, S., Collingbourne, Kingston, Wilts
 Lawford, E. A., Leighton Buzzard, Beds
 Lawrence, A. T., Clifton
 Lawson, W., 13, Cleveland st., Fitzroy sq.
 Lay, J. J., Peasenhall, Suffolk
 Lay, H., Wangford
 Laycock, W., Walton, Essex
 Laycock, H. S., North Dispensary, Liverpool
 Layman, J. M., Shefford, Bedfordshire
 Leach, I., Heywood, near Bury, Lancashire
 Leach, A., Waterhead Mill, Oldham
 Leake, J., Hereford
 Leake, B., Bampton, Oxon
 Leake, E., Penzance, Cornwall
 Leadham, T. A., 65, Tooley street
 Leaker, J. E., Bristol
 Leamon, E. F., Tavistock, Devon
 Le Cocq, G., St. Hillier's, Jersey
 Lee, R., Thame, Oxon
 Lee, H. W., Hull
 Lee, A., 6, Three Crown square, Borough
 Leech, W., Chilcompton, Somerset
 Leech, E., Chichester, Sussex
 Leech, John, South Dispensary, Liverpool
 Le Gros, J., Hythe
 Lees, W., Hulme
 Leese, G. M., 16, Baker street
 Leeson, J. B., Kensington
 Leete, H., Thrapstone, Northampton
 Leete, J. G., Thrapstone, Northampton
 Legg, William, 2, King's Wood place, South Lambeth
 Leggatt, A., 70, Ebury street, Pimlico
 Leggatt, R. S., Eastry, Kent
 Leggatt, R. S., jun., Eastry, Kent
 Leigh, W. O., High street, Deptford
 Leigh, Peter, Seymour street, Liverpool
 Leigh, J., Lanfabon, Cardiff, South Wales
 Leigh, H. T., Turnham Green
 Leithead, T., Warkworth, Northumberland
 Leonard, G., Dursley, Gloucester
 Leonard, J., Bristol
 Leonard, T., 14, Aske terrace, Hoxton
 Leney, G., Maidstone
 Lerew, W. H., 10, North st., Maida Hill
 Lerew, F. H., 17, Edward street, Hampstead road
 Leslie, David A., 4, Penton st., Pentonville
 Leslie, T. C., 4, Penton street, Pentonville
 Lever, B., Blakesley, Northampton
 Lewes, H. A., Leominster
 Lewis, L., Wymondham, Norfolk
 Lewis, H. J., Scole, Norfolk
 Lewis, G., sen., Wrexham, Denbigh, Surgeon to the Infirmary and Dispensary
 Lewis, J. K., Merton road, Tooting
 Lewis, T. H., Stony Stratford, Bucks
 Lewis, W. P., Beaumaris
 Lewis, H. F., 182, Brick lane, Spitalfields
 Lewis, John, 4, Haydon square, Minorities
 Lewis, F.
 Lewis, W. J., 7, Spital square
 Lewis, T., 2, Roberts' place, Commercial road, East
 Lewtas, S., Hunter-street, Liverpool
 Ley, W., North Molton, Devon
 Ley, W., 9, Lisson grove South
 Lichfield, T., Twickenham
 Liddle, J., 88, Leman st., Goodman's fields
 Lilley, J., Wisbeach
 Lilley, F. J., Wisbeach
 Lilly, T. E., Chester
 Lilly, J. W., Ollerton, Notts
 Lindo, L., 30, Bishopgate street
 Lindop, William, Newport, Salop
 Linnecar, E. H., 1, New Basinghall street
 Linton, P., Carlisle
 Linton, C., Oundle, Northampton
 List, G. B.
 List, G. B., Southampton
 Lister, C., Norton street, Liverpool
 Liston, J. M., Penkridge, Stafford
 Little, J., Devonport
 Little, D., Stonehouse
 Little, J., Millbrook, Devon
 Little, J. C., Boston
 Littlewood, J. J., Thorne, Yorkshire
 Llewellyn, T., 9, Mount pl., Whitechapel
 Llewellyn, John, Newport
 Lloyd, T., 5, New Basinghall street
 Lloyd, W. W., 62, Great Russell street
 Lloyd, D., Greenwich
 Lloyd, J., Langeftin, Anglesea
 Lloyd, J. A., Bath
 Lloyd, —, Fishguard, Pembroke
 Loadman, R. M., Hammersmith
 Lobb, W., 12, Aldersgate street
 Lockwood, Thos., London rd., Liverpool
 Lodge, R., Hawkshead, Lancashire
 Lodge, R. T., Clarence street, Liverpool
 Lomas, S., Horncastle
 Lomax, C., Weobley, Hereford
 Lomax, W. J., Lincoln
 Lomax, H. I., Bingham, near Grantham
 Loney, W., Youlgrave, Bakewell, Derby
 Longbottom, G. J., Vauxhall road, Liverpool
 Longstaff, E. H., Ilkiston, Derby
 Lord, C. F. G., Hampstead
 Loughton, J., Southport, Ormskirk
 Love, J., 12, Brook street
 Love, J., Castle Acre, Norfolk
 Love, J., 11, Grosvenor row, Pimlico
 Lovegrove, J., Horsham
 Loveless, W. K., Stockbridge, Hants
 Lovell, F., Chelmsford, Essex
 Lowdell, G., House Surgeon to the Sussex County Hospital
 Lowe, R., Bristol, Senior Surgeon to the Infirmary
 Lowe, J., Manchester
 Lowe, T., Congleton, Cheshire
 Lowe, S. S., Stratford-upon-Avon
 Love, W., Stockport
 Lowe, Francis Armitage, Gainsborough
 Lowne, George G., Walworth
 Lowry, George, Corbridge, Newcastle-on-Tyne
 Lowther, G., Hull
 Loy, J. G., M.D., Whitby, Yorkshire, Physician to the Whitby Public Dispensary
 Lucas, W. O., 8, Taunton place, Regent's park
 Lucas, T., Burwell, Cambridge
 Luce, J. J., Kingston, Surrey
 Lugg, James, 33, Colet place, Commercial road
 Lupton, T. B., Thame, Oxon
 Lupton, H., Thame, Oxon
 Lupton, Benjamin, Cheadle, Cheshire
 Lush, J. A., Salisbury
 Lyddon, J., Exeter
 Lyddon, J. S., Birkenhead, Cheshire
 Lyde, J. W. P., Hay, Brecknock
 Lynch, J. R., 24, Farringdon street
 Lyndall, J., 12, King street terrace, New North road
 Lyne, E. O., Malmsbury, Wilts
 Lyon, P., St. Hillier's, Jersey
 Maaley, W. E., Tyldesley, near Manchester
 Macann, A., 22, King street, Portman sq.
 Macauley, G. A., Heckmondwicke, West York
 Macauley, T., Leicester
 McBride, Daniel, Omagh, Tyrone, Ireland
 Macbryde, James, West Bromwich, Stafford
 Mc'Cann, N., 50, Parliament street, Surgeon to the Police
 Mc'Carron, W., Russell street, Liverpool
 Maccenzie, F., Tiverton, Devon
 Mc'Crea, J., 37, Crompton terrace, Islington
 Mc'Chene, W., Infirmary, Liverpool
 Mc'Collah, R. I.
 Mc'Cord, James R. (M.D.), Guernsey
 Mc'Donald, D., Tiverton, Devon
 Mc'Donald, W., 23, Princes street, Cavendish square
 Mc'Donough, John, Clapham
 Mc'Donough, J. J., Swords' Dispensary, Dublin
 Mc'Dowill, William, R. N., 38, Walcot sq.
 Mc'Fie, W., Seymour street, Liverpool
 Mc'Gill, W., 2, Bentinck terrace, Regent's park
 Mc'Guire, W. E., 29, Cannon street, City
 Mc'Intyre, S. (M.D.), Odiham, Hants
 Mc'Intyre, D., Odiham, Hants
 Mack, Richard John, Tunstead, Norfolk
 Mc'Kee, A., Wanstead
 Mackarsie, W. J., Cuch, near Alfreton, Derby
 Mc'Ker, W., Toxteth park, Liverpool
 Mackenzie, S., Leytonstone, Essex
 Mackenzie, R. H., 68, Mortimer street
 Mackereth, G., Hull, Yorkshire
 Mackinlay, J., Isleworth
 Mackmeikan, J., London Hospital
 Maclay, David, Gloucester st., Liverpool
 Mac'Lachlan, R., Shelf, Halifax, Yorkshire
 Mac'Leod, A., Okehampton, Devon
 Maclellan, Andrew, South Dispensary, Liverpool
 Maclure, William, 14, Harley street
 Macmarter, P., Ormskirk
 Mc'Millan, M., Dollar, North Britain
 Mc'Millan, J., Acomb, Yorkshire
 Macnamara, D., Uxbridge
 Macnaught, J., North Bedford street, Liverpool
 Mc'Nay, T. F., Newcastle-on-Tyne
 Mc'Nicholl, D. H., Rishmore row, Liverpool
 Mc'Taggart, P., Navenby
 Madows, G. D., Portsmouth
 Magenias, Peter, 29, Chichester place, Gray's Inn road
 Maiben, W. A., Brighton
 Maine, C. P., Boxford, Suffolk
 Maize, J., 274, Kent street, Borough
 Major, W., 12, Mount place, Whitechapel road
 Makins, G. H., 2, Camden hill villas, Kensington
 Malcolm, George, 1, Globe st., Wapping
 Malcom, J., Kirkleatham Hospital, Gisborough, York
 Mallet, W. E., St. Hillier's, Jersey
 Malton, F. L., Glastonbury, Somerset
 Manby, E. S., East Rudham, Norfolk
 Manby, F., East Rudham, Norfolk
 Manley, John (M.D.), Barking
 Mann, J., 63, Bartholomew close
 Mann, R. T.
 Mann, T. W., 5, Belgrave place, Holloway
 Mann, C. W., 20, Blandford street
 Manning, F., Dedham, Essex
 Manry, Francis, Leatherhead
 Mansfield, R., Broseley Iron Works, Salop
 Mantell, G. H., Farringdon
 March, J., Mount Pleasant, Liverpool
 Marchant, R., Northcurry, near Taunton
 Marley, M., 11, Cork street
 Marner, J., Attleborough
 Marriott, E. H., Ryde, Isle of Wight
 (To be continued.)

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLX. REMARKABLE CASE OF DIABETES MELLITUS.—M. Hauner reports in *Casper's Wochenschrift*, the case of an infant a year old, who died of diabetes mellitus. The disease was not at first recognised, but attention was at last attracted by the child's excessive thirst, and the copious discharge of urine. It drank five or six, and sometimes even eight or nine quarts of cold water, and the quantity of urine passed, perhaps, even exceeded this. The urine was found on examination to be inodorous, pale, a little turbid, and sweetish. The child was put upon a diet of animal food, consisting of broth and eggs, and at first seemed to improve, but the symptoms re-appeared, and he ultimately sank. The *post-mortem* showed nothing remarkable, with the exception of the kidneys, which were double the natural size, of a greyish white colour checkered with brown, and indurated. A number of small abscesses were collected in its substance. The urethral and vesical mucous membranes were also inflamed.—*L'Union Médicale*, January 21, 1851.

CLXI.—ON INTESTINAL HÆMORRHAGE IN NEW-BORN INFANTS, BY DR. RILLIET of Geneva.—The form of intestinal hæmorrhage in new born infants, known as *Melana infantum*, usually occurs shortly after and during the first day of birth, although it has been asserted by Edinger, that it may occur as late as the fourth or fifth month after birth. The questions, whether it depends on a hereditary cause,—such as abdominal plethora in the mother, or a tendency to hæmorrhage in the parents, is still involved in great obscurity; and the same may be said in reference to the influence attributable to any injury to the child during delivery, or from the premature tying of the umbilical cord.

Dr. Rilliet did not observe a plethoric constitution in more than half the number of his little patients. The observations made in a *post mortem* examination, appearances presented after death, refute the view entertained by Brebis of the hæmorrhage originating in a laceration of a blood-vessel, for no change was ever remarked excepting that in some cases the larger vessels in the different cavities of the body were somewhat overcharged with blood. The true predisposing causes must therefore be sought, 1st., in an injected condition of the intestinal canal, which, as Billard has shown, is a normal condition in new-born infants, and which predisposes to hæmorrhage when accompanied with atony of the vessels, and stoppage of blood in the portal system, disturbing the circulation of the blood in the abdomen, in consequence of enlargement of the liver and spleen; 2nd., in the imperfect establishment of respiration, owing to the difficulty with which the blood enters the imperfectly expanded lungs, and its consequent tendency to overcharge the other organs, and more especially the intestines from their congested condition.

Instead of enumerating the individual symptoms of this affection, we will subjoin a case as given by Dr. Rilliet.

Case I.—Delivery had been facilitated by the use of the forceps, although presenting no extraordinary difficulties, and the umbilical cord had been tied in the ordinary manner and at the proper time. The child—a male twin—appeared when seen 24 hours after birth, fully developed and well-grown; but not of a plethoric habit. He cried loudly; and all the functions of the body seemed healthy. Half a spoonful of castor oil had been given, and the meconium had been discharged; when the nurse observed another slight discharge mixed with a considerable quantity of blood. Two hours afterwards the child had in rapid succession two copious discharges of clear fluid blood mixed with coagula. The child was then pale and much changed; the pulse was no longer perceptible; the extremities were cold; the eyes and mouth were mostly shut; he could not swallow, but was restless and cried. The abdomen was soft, but neither inflated nor sensitive. There was no retching or eructation; applications of cold vinegar were laid on the abdomen, and the extremities wrapped in warm flannels. Two injections containing 12 gr. of extract of rhatany were administered, but almost instantly returned with a considerable quantity of blood. Three hours after, the patient was still in the same condition; and as all attempts at administering an injection proved of no avail, no methods were attempted but the cold applications, as before. Towards evening there was a sixth discharge, the pulse then rose somewhat (120); there was slight trembling of the hands and rolling of the eyes, but no actual convulsions. He took a few tea-spoonfuls of cold milk, and the next morning was put to the breast. The

pulse was then regular and might easily be felt. At noon he had two green healthy-looking stools, containing neither blood nor coagulated milk. The child recovered from this time, but was still of a waxy yellow colour, much emaciated, but lively. The spleen was detected as being enlarged. He was vaccinated at ten weeks, when the slight puncturing of the skin was followed by considerable bleeding. No cause, whether internal or external, hereditary or acquired, could be adduced in explanation of the origin of the hæmorrhage.

Case II.—The child referred to in case I. was still in a dangerous condition, when the twin brother (38 hours after birth) began to vomit blood, and at the same time passed several stools of fluid blood mixed with brownish red lumps. The rhatany injections here also increased the discharge of blood, and therefore the treatment was limited to cold applications to the abdomen, and warm wrappers to the extremities. The general symptoms were the same as in case I., and the bloody discharges continued, although in a less intense degree. As soon as the child took the breast, yellow stools passed without further admixture of blood.

From the cases hitherto recorded of this affection, we obtain the following results: the occurrence of hæmorrhage is more frequent before than after the discharge of the meconium, and in the majority of cases is unattended by any precursory symptoms. The affection begins with bleeding from the intestine more frequently than from the umbilicus; the cases are very rare in which it is ushered in by vomiting blood at the same time that bloody stools are passed. The hæmorrhage is in most cases very abundant, and returns at short intervals. The blood is generally of a dark colour, rich in coagula, sometimes fluid, and frequently mixed with large clots. At first it is usually mixed with a small quantity of meconium, but afterwards pure blood is discharged. The bleeding continues about 24 hours, although in some rare cases it has not been arrested for three, or even five days. The effects are those usual in the anæmic condition.

The affection is by no means so fatal as might at first sight be supposed. Of twenty-three cases, twelve recovered, and eleven terminated fatally. In most of the cases that recovered, the constitution appeared much enfeebled. Dr. Rilliet thinks that in most cases (unless where there is extreme exhaustion, and when small doses of anodynes may be prescribed), internal means are of little avail; and that the treatment should be limited, a careful attention to the ventilation of the apartment in which the patients are kept, cold applications to the abdomen, and warm wrappers to the extremities. A spoonful of the mother's milk should be given as soon as possible, and the child put to the breast if strong enough. All artificial means of feeding should be avoided.

Dr. Rilliet concludes his paper by observing that the term *melana infantum*, usually applied to this affection, is very objectionable, since by *melana* we undoubtedly understand a morbid alteration in the blood—a venous blood-crisis, which indicates the use of cooling, saline, and acid aperients, and is generally productive of hæmorrhage into the stomach, through the vasa brevia, but not from the capillaries of the mucous membrane of the intestine. The intestinal hæmorrhage of new-born infants must, on the contrary, be referred to the overcharged condition of the abdominal arteries, induced, as before observed, by the imperfect establishment of the post foetal circulation, the potency of the foramen ovale and ductus arteriosus, and the imperfect expansion of the tissue of the lung. If the affection actually depends on these conditions, we must regard all incitements to the respiratory process as the surest preventive and curative means of treating this disease.—*Schweiz Zeitschr.*, 1850.

CLXII.—DEATH FROM TAKING TOO LARGE A QUANTITY OF MORISON'S PILLS. BY DR. MAIER, of Ulm.—A girl aged 13, of a feeble constitution and weak chest, who had for some time exhibited chlorotic symptoms, had accustomed herself for a fortnight to the methodical use of Morison's pills, increasing the number each day. After having taken seven boxes of No. 2, vomiting came on. The countenance was then extremely pale, the eyes were fixed, the pupils dilated, the pulse much accelerated, the lower jaw convulsively closed, the respiration impeded: the abdomen was neither tympanitic or painful when touched. There was complete stupefaction and obstinate constipation. The treatment consisted of sinapisms, vinegar, lotions, and cold applications; vinegar injections, effervescent draughts, laxatives, and vesicatories to the neck. The symptoms grew worse, the pulse became very frequent and irregular; entire unconsciousness and insensibility; the mouth convulsively closed; deglutition accompanied with extreme difficulty. The patient died after continuing in the same comatose state for two hours. *Post-mortem examination.*—The membranes and substance of the brain were strongly cou-

gested; the blood was pale and watery. There was no effusion in the cavities. In the left half of the thorax were 4 oz. of sanguineous fluid. The lower lobes of the lungs were overloaded with blood, the greater portion of the left lung contained no air, there were no adhesions. Slight adhesion of the lower part of the right lung, slight emphysema in the anterior part, and pale red coloration; the upper portion was still pervious to air. The heart was of the normal size, the vessels distended with blood; under the lower surface of the left side, were many isolated blood spots; dense coagulum of fibrin in the right auricle, and in both ventricles. The abdominal viscera somewhat pale; the stomach considerably distended, filled with a yellowish green fluid, having a faintly acid smell. The mucous membrane of the anterior portion of the stomach, which was somewhat relaxed and puffy, was covered for about a hand's breadth of its surface, with densely crowded blood spots. The oesophagus was pale, but not otherwise changed. The duodenum was coloured bright orange yellow, and filled with a fluid of the same colour. The small intestines were pale, like the other abdominal viscera.

The condition of the mucous membrane of the stomach, coincides with the irritating properties of the long-continued use of the pills, although it shows that they could not have contained any caustics. It would appear that the long continued use of this medicine produced extreme local irritation, and that death was perhaps accelerated in this case, by the sympathetic irritation of the nervous system, induced by the feeble constitution, and the diseased state of the lungs of the patient, who was thus unable to oppose any reaction to the injurious effects of the pills.—*Würtemb. Corr. Blatt.* 1850.

CLXIII.—PRACTICAL OBSERVATIONS. BY DR. J. L. JEUNI, OF GLARUS.—We extract the following observations from a valuable paper by Dr. Jeuni, (of Glarus, Switzerland), in which he has given a detailed report of the different cases treated in an extensive country practice, together with the different characteristics exhibited by certain epidemics prevalent in the district in which he lives. The latter as having a purely local interest we omit.

Hydrocephalus acutus aetorum.—Of sixty-three cases treated since 1833, fifty-nine died, after exhibiting in almost every case coma, convulsions, and coldness of the skin for several days before death. The usual means (cold affusions, iodide of potassium, &c.) were found unavailing. Retraction of the head was not a constant symptom, and the *post-mortem* examination did not always exhibit effusion of serum or products of inflammation.

Delirium tremens.—Here solid opium was invariably found to yield great benefit, after the cerebral hyperæmia had been allayed by leeches, ice to the head, derivatives, &c.

Croup.—The treatment, which should be applied without a moment's loss of time, consists in emetics, followed by leeches, mercurial inunctions, and calomel, together with small doses of antimonial wine. The inflammation frequently attacks the bronchial tubes and the lungs. Zinc sulph. and cupr. sulph. are of use where antimonial wine has been unable to produce vomiting, which is always a bad symptom. A strip of blistering plaister laid over the trachea and the larynx is found of much service in accelerating the cure.

Pneumonia.—Dr. Jeuni prefers the older method of treatment by venesection, nitrate of potash, and then calomel, with antimonial wine, &c. He does not think that any confidence can be placed in Peschier's mode of employing tartar emetic, nor in Ritter's mixture (composed of sugar of lead, with digitalis and laudanum). Calomel promotes the restoration of the diseased pulmonary tissue. When the patient is salivated, he may be regarded as saved.

Gastritis chronica mucosa.—This is of frequent occurrence, masked by cramp in the stomach, cancer of the stomach, &c. Local bleeding by cupping, sinapisms, blisters, emulsions of aqu. laurocer., and a milk diet were found to be the most successful means of treatment. A rigid diet is essential. When the pains have been allayed, together with the redness of the tongue, much benefit was derived from the use of nitrate of silver ($\frac{1}{4}$ to $\frac{1}{2}$ gr.) or even more, in 6 oz. water, of which three or four table-spoonfuls were to be taken daily. Stomachics were found to be prejudicial.

Blennorrhæa uteri.—Injections of decoction of mallows, chamomile tea, soap and water, but more especially of a solution of nitrate of silver. The internal means were iodide of potassium, and in women of puffy appearance and lymphatic temperament, also iodide of iron, &c.

Scabies.—Horn's liniment, (consisting of one part of flowers of sulphur, two parts green soap, dissolved in water) together with soap baths, were generally found sufficient. In *scabies inveterata*, baths of sulphuret of potash were employed, together with an ointment of iodide of sulphur (12 gr. to 1 $\frac{3}{4}$ of lard), and laxatives. In other eruptions of the skin of long standing, the iodide of sulphur ointment (15–20 gr. to $\frac{3}{4}$ j), was found very useful.

Eczema impetiginodes.—An inveterate case of this affection, which had deprived the patient of all rest, from the incessant itching and the tearing pains in the limbs, with which it was accompanied, was entirely cured by the following treatment:—inunctions with ol. hyosc. and morphia, while tinct. colchici was taken internally, followed by the use of lotions containing bichloride of mercury, and lastly by the internal administration of tinct. colchici, bichloride of mercury and laudanum, with the external employment of an ointment of iodide of sulphur.

Dysentery.—A decoction of lich. isl., with small doses of extr. nucis vomicæ, afforded the most favourable results.

Helminthiasis.—A dose of santonin, corresponding to the age of the child (one grain for each year), with calomel up to 6 grs., was substituted for the nauseous powders and electuaries generally given in this affection. For ascariæ it was found necessary to employ injections of infus. semin. cynæ. to which inf. absinthii, and tinct. assafœt. were added for adults.

Chlorosis was found to be very abundant among persons of all stations of life. The greenish white complexion is not always present, and in many cases the patients have a healthy, even ruddy appearance (chl. florida). Dr. Jeuni frequently found it necessary to employ medicines to allay the irritability of the stomach, such as digitalis, everescent draughts, aqua laurocerasi, infus. quassæ frigid. &c., before preparations of iron could be given. Among the latter, he recommends tinct. ferri tartarisati (with equal parts of cinnamon water, from one to two table-spoonfuls to be taken two or three times a day), and ferrum carbon. (2 or 3 grs. sulph. ferri. with sugar, and 2 or 3 grs. soda bicarb., with sugar, separately dissolved in water, and afterwards mixed together). In obstinate cases, he also gives magnetic oxide of iron (to be taken in the form of lozenges).

Dropsies.—In some cases benefit is denied from infus. digitalis with nitr. acet., iodide of potassium, Hufeland's pills (composed of guaiacum, gamboge, squills, black oxide of mercury, and extr. lenistici).

Phthisis tuberculosa.—Decoction of carrageen taken morning and evening, was found to be a good substitute for most of the means ordinarily prescribed; or a compound carrageen and gelatine powder with gum. arab., tris flor., arrowroot and sugar, mixed in cold water, and diluted with hot water, was found useful. The best means of allaying the cough, *malaise*, &c., was found to be morphia, given in pills with extr. digitalis.

Neuralgia.—Morphia, given internally and endermically, is the best palliative; inhalations of chloroform frequently afford much relief. In sciatica (which is frequently a rheumatic affection), bichloride of mercury, with vinum colchici, will be found useful, when accompanied with cupping; moxas are preferable to blistering plaisters. Dr. Jeuni seldom derived any benefit from the use of veratrine, zinci valerian., acupuncture, and ferri carb.; while on the contrary, considerable relief was obtained, in some cases, from ol. tereb., applied externally as well as internally, and also from croton oil inunctions. In *neuralgia intermittens*, quinine is a valuable remedy.

Asthma spasmodicum.—Morphia and sinapisms shortened the attacks. The catarrh was got rid of by antimonial wine, &c. In a case induced by wetting the feet, a cure was effected in little more than a week, by strewing muriate of ammonia (3j.) on the feet!

Lead-Colic.—When croton oil and castor oil proved of no avail, Dr. Jeuni changed the treatment, with success, to venesection, a belladonna injection, and 1 grain of morphia, *pro dosi*. The cure was completed by chalybeates. The same means, with the addition of preparations of sulphur, are recommended in lead-paralysis and tremors.

Hysteria.—Chloroform inhalations are an admirable means of calming the violence of the attacks. The general health should be strengthened by steel.

Chorea.—Morphia was decidedly efficacious in allaying the excitement, while Dr. Jeuni found reason for avoiding the use of strychnine.—*Schweiz Zeitsch.*, 1850.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Column of the Barometer above the Level of the Sea.	TEMPERATURE OF AIR.										Mean elastic force of Vapour.	Range of Barometer Headings.	TEMPERATURE OF AIR.					Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	Mean amount of Cloud. 0-10	AUTHORITIES AND NAMES OF OBSERVERS.							
				Lowest.			Range in the Week.			Mean of all the		Mean Daily				Mean.																
				Highest.	Lowest.	Range in the Week.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily	Mean.	Highest.	Lowest.	Mean.																			
Jersey.....	49° 11'	2° 6' W.	84	30.028	30.286	29.890	0.396	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	Rev. S. King, F.R.A.S., M.B.M.S.		
Guernsey.....	49° 33'	2° 40' W.	123	29.934	30.115	29.775	0.340	0.280	50.0	34.0	16.0	47.5	39.3	7.6	43.5	42.7	41.6	3.26	0.20	0.942	546.8	3.6	0.942	546.8	3.6	0.942	546.8	3.6	0.942	546.8	3.6	Dr. Hoskins, F.R.S., M.B.M.S.
Truro.....	50° 17'	5° 4' W.	55	30.048	30.290	30.010	0.380	0.268	50.0	27.0	28.0	52.0	38.9	13.1	45.3	43.2	40.3	3.11	0.56	0.848	547.0	7.0	0.848	547.0	7.0	0.848	547.0	7.0	0.848	547.0	7.0	Dr. Barham.
Exeter.....	50° 45'	3° 41' W.	140	29.870	30.190	29.702	0.458	0.262	57.0	23.6	38.4	51.3	37.3	14.0	43.9	42.1	39.7	3.04	0.47	0.882	545.3	4.0	0.882	545.3	4.0	0.882	545.3	4.0	0.882	545.3	4.0	Dr. Shapter, M.B.M.S.
Southampton.....	50° 54'	1° 24' W.	55	29.935	30.195	29.744	0.451	0.266	53.2	26.3	28.9	48.8	37.2	11.6	42.1	40.9	39.2	2.98	0.33	0.901	548.6	6.1	0.901	548.6	6.1	0.901	548.6	6.1	0.901	548.6	6.1	J. Drew, Esq., F.R.A.S., M.B.M.S.
Uckfield.....	50° 59'	0° 5' E.	180	29.883	30.120	29.710	0.410	0.243	51.0	24.0	27.0	47.7	35.3	12.4	41.1	39.7	37.8	2.88	0.35	0.894	548.9	6.5	0.894	548.9	6.5	0.894	548.9	6.5	0.894	548.9	6.5	C. L. Prince, Esq., M.R.C.S., M.B.M.S.
Greenwich.....	51° 29'	0° 0' W.	160	29.870	30.168	29.611	0.558	0.244	57.1	23.7	33.4	50.3	35.1	15.2	42.5	40.8	37.8	2.84	0.51	0.832	547.5	—	0.832	547.5	—	0.832	547.5	—	0.832	547.5	—	From Reg-Gen. Report.
Lewisham.....	51° 39'	0° 1' W.	78	29.951	30.300	29.761	0.539	0.243	53.2	23.0	39.2	51.5	35.6	15.9	43.0	40.3	37.8	2.84	0.57	0.834	547.5	—	0.834	547.5	—	0.834	547.5	—	0.834	547.5	—	H. Gordon, Esq.
St. John's Wood.....	51° 32'	0° 1' W.	150	29.875	30.198	29.700	0.498	0.254	57.0	22.5	34.2	54.8	33.9	15.9	41.3	40.3	38.9	2.97	0.25	0.923	548.4	8.3	0.923	548.4	8.3	0.923	548.4	8.3	0.923	548.4	8.3	G. Leach, Esq., F.Z.S., M.R.M.S.
Hartwell.....	51° 49'	0° 51' W.	250	29.695	30.050	29.528	0.524	0.259	55.3	22.5	32.9	49.2	32.7	16.5	41.2	39.8	37.9	2.86	0.35	0.894	547.1	6.8	0.894	547.1	6.8	0.894	547.1	6.8	0.894	547.1	6.8	Dr. Lee, F.R.S., Treas. B.M.S.
Cardington.....	52° 7'	0° 25' W.	100	29.802	30.232	29.704	0.528	0.241	55.0	24.0	31.0	49.5	34.5	15.0	42.3	40.5	39.3	3.02	0.23	0.930	545.0	6.6	0.930	545.0	6.6	0.930	545.0	6.6	0.930	545.0	6.6	S.C. Whitbread, Esq., F.R.A.S., Pres. B.M.S.
Norwich.....	52° 37'	1° 16' E.	39	29.924	30.131	29.775	0.356	0.241	55.0	24.0	31.0	49.5	34.5	15.0	42.3	40.5	39.3	2.79	0.54	0.840	545.2	6.6	0.840	545.2	6.6	0.840	545.2	6.6	0.840	545.2	6.6	W. Brooke, Esq., F.R.A.S., M.B.M.S.
Nottingham.....	52° 58'	1° 10' W.	203	29.815	30.129	29.657	0.442	0.239	61.0	23.5	37.3	51.1	33.0	18.1	41.1	39.5	37.3	2.81	0.39	0.879	547.7	5.0	0.879	547.7	5.0	0.879	547.7	5.0	0.879	547.7	5.0	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.
Grantham.....	52° 55'	0° 39' W.	190	29.780	30.110	29.550	0.560	0.244	52.5	26.5	26.0	47.6	35.9	11.7	41.0	39.6	37.7	2.85	0.34	0.889	546.9	5.7	0.889	546.9	5.7	0.889	546.9	5.7	0.889	546.9	5.7	J. W. Jeans, Esq., F.R.A.S., M.B.M.S.
Hawarden.....	53°	3° 0' E.	260	29.659	30.007	29.535	0.472	0.261	53.5	29.5	24.5	47.0	36.2	10.8	41.8	40.9	39.6	3.06	0.23	0.930	545.8	7.1	0.930	545.8	7.1	0.930	545.8	7.1	0.930	545.8	7.1	Dr. Moffatt, F.R.A.S., M.B.M.S.
Liverpool Observatory.....	53° 25'	3° 0' W.	37	29.919	30.303	29.759	0.544	0.240	53.5	33.9	24.5	48.5	39.4	9.1	43.2	41.4	38.2	2.89	0.54	0.842	546.8	6.9	0.842	546.8	6.9	0.842	546.8	6.9	0.842	546.8	6.9	John Hartup, Esq., F.R.A.S.
Manchester.....	53° 28'	2° 16' W.	144	29.801	30.256	29.673	0.533	0.246	53.0	28.5	24.5	46.2	38.1	10.1	40.4	39.4	38.1	2.88	0.25	0.923	549.2	6.3	0.923	549.2	6.3	0.923	549.2	6.3	0.923	549.2	6.3	G. V. Vernon, Esq., M.B.M.S.
Wakfield.....	53° 41'	1° 30' W.	115	29.800	30.115	29.621	0.494	0.223	57.0	22.0	35.0	49.4	31.6	17.8	40.2	38.1	35.1	2.59	0.52	0.835	551.6	6.4	0.835	551.6	6.4	0.835	551.6	6.4	0.835	551.6	6.4	W. R. Milner, Esq., M.B.M.S.
Stonyhurst.....	53° 51'	2° 29' W.	381	29.495	29.888	29.311	0.547	0.240	49.7	26.6	23.1	47.2	39.3	13.9	40.4	39.1	37.2	2.80	0.32	0.900	542.4	6.5	0.900	542.4	6.5	0.900	542.4	6.5	0.900	542.4	6.5	Rev. A. Ward, F.R.A.S., M.B.M.S.
Whitehaven.....	54° 33'	3° 25' W.	90	29.762	30.130	29.540	0.590	0.260	50.0	33.0	17.0	46.1	40.1	6.0	42.6	41.3	39.5	3.03	0.34	0.900	544.5	—	0.900	544.5	—	0.900	544.5	—	0.900	544.5	—	J. F. Miller, Esq., F.R.S., M.B.M.S.
Glasgow.....	55° 51'	4° 18' W.	121	29.638	30.165	29.377	0.788	0.260	50.2	31.0	19.2	48.5	38.5	10.0	43.3	41.7	39.6	3.02	0.42	0.878	541.8	—	0.878	541.8	—	0.878	541.8	—	0.878	541.8	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.
Dunino.....	56° 16'	2° 49' W.	250	29.834	30.180	29.670	0.780	0.235	53.0	29.0	24.0	47.0	38.6	10.4	41.5	39.5	36.8	2.76	0.49	0.851	539.3	2.8	0.851	539.3	2.8	0.851	539.3	2.8	0.851	539.3	2.8	David Tennant, Esq., M.B.M.S.

The highest readings of the thermometer in air were 61° at Nottingham, 60° at Jersey, and 57° at Greenwich.

The lowest readings were 22° at Wakefield, and 22° at Cardigan, Hartwell, and St. John's Wood.

The least daily ranges of temperature took place at Whitehaven, 6°, and at Guernsey, 7°; their mean value is 6° 8', and the greatest occurred at Nottingham, 19° 1', at Wakefield, 17° 8', and at Jersey, 17° 2', and their mean value is 17° 7'.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Feet.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Read- ings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Temperature.	Mean of all the Highest Readings of the Ther- mometer.	Mean of all the Lowest Readings of the Ther- mometer.	Mean Daily Range of Temperature.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Hu- midity.	Mean weight of a cubic foot of Air.	WIND.		RAIN.		Mean amount of Cloud.		
																			General Direction.	Average Strength.	Average number of days it fell.	Average fall.			
Truro and Exeter	98	50.31	29.959	in.	0.265	56.0	25.3	30.7	51.7	38.1	13.6	44.6	49.7	40.0	0.68	0.32	0.855	546.2	grs.	ESE. & WSW.	1.3	2.0	0.59	in.	5.5
Southampton to Hartwell	146	51.22	29.889	0.250	54.8	23.7	30.3	30.3	49.7	35.2	14.5	41.9	40.4	38.4	2.92	0.37	0.886	547.7	grs.	ESE. & SW.	1.2	2.0	0.19	6.6	6.6
Cardington to Hawarden	158	52.43	29.796	0.246	55.5	25.2	30.3	30.3	48.9	34.5	14.4	41.5	40.0	38.0	2.87	0.36	0.886	546.7	grs.	SW.	1.2	2.0	0.15	6.2	6.2
Manchester to Stonyhurst	213	53.20	29.719	0.236	53.2	25.2	27.5	27.5	47.6	33.7	13.9	40.3	38.9	36.3	2.76	0.34	0.886	547.4	grs.	SW.	1.8	4.0	0.32	6.4	6.4
Liverpool and Whitehaven	64	53.59	29.629	0.245	51.8	25.5	29.7	18.3	47.3	39.8	7.5	42.9	41.4	38.3	2.96	0.44	0.871	545.7	grs.	SW.	1.8	4.0	0.50	0.59	—
Glasgow and Dumino	186	56.4	29.516	0.243	51.6	30.0	30.0	21.6	47.8	37.6	10.2	42.4	40.6	38.2	2.85	0.46	0.905	540.6	grs.	SW.	—	5.0	0.58	—	—

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals. * (Glasgow.)

At JERSEY, another serene and bright week. The enjoyment of this beautiful weather is damped by the anticipation of the cold and blighting winds of March upon the opening blossoms and forward vegetation. February 17th was the coldest day of the winter. The readings of the thermometer on the grass, on the 16th was 24.5 deg.; on the 17th, was 23 deg.; on the 21st, was 30 deg. Rhododendrons, and many species of heaths in flower in the open ground.

I suspect that the minimum thermometer, under the pent of the stand, does not give the proper minimum temperature. The gardeners place a projecting coping over their fruit walls to protect the trees from what they call the perpendicular frost; the pent must similarly protect the thermometer. I have put a thermometer upon the outside slope of the stand (the roof) within the last day or two, which gives a difference of from 2 to 4 degs. from that under shelter. [The thermometer should be placed under the shed; when placed on the outside slope it is influenced by the effects of radiation; see Glaisher's paper on the radiation of heat in *Philosophical Transactions* for 1847.—Editor.]

At GUERNSEY, February 16th, hoar frost, clear, calm; 17th, hoar frost, A.M., P.M. sunshine and clouds, wind S.W.; evening misty; 18th, sunshine and clouds, slight breeze; 19th, A.M., clouds and sunshine, fresh breeze; P.M. overcast; 20th, A.M., clouds and wind; P.M. clear; 21st, partial frost, clouds and sunshine, calm; 22nd, A.M., clouds and sunshine, fresh breeze; P.M. clear.

At TRURO, 16th, fine throughout, fresh breeze. 17th, A.M., early fog; gently dropping rain from 9 to 2; afterwards overcast. 18th, fair throughout, at times sunshine; evening and night damp. 19th, generally overcast, but pleasant. 20th, A.M., fine; P.M., fair; towards sunset, massy clouds (nimbi); evening and night damp (fine drizzle); light wind. 21st, A.M., fair; P.M., fine; night fair; gusty. 22nd, fine throughout; fresh drying wind, increasing through the day; night overcast; fresh wind.

At SOUTHAMPTON, the 16th, 17th, 18th, 21st, and 22nd were fine; a sharp frost on the 17th. Swarms of gnats on the 21st.

At UCKFIELD, 16th, hoar frost; cirro-cumulus clouds; fine day and night. 17th, hoar frost; clear day, but the atmosphere nearly saturated with moisture. The 18th, 19th, and 20th were densely overcast. 21st, showery morning; fine day; solar halo, 1 P.M.; fine night. 22nd, fine morning; variety of cloud; fine day, evening, and night. Vegetation is very forward, although the temperature fell to 17 deg. on the grass, on the 17th. Ice upon ponds was about one inch thick. The cowslip has come into flower; many trees are budding, and will soon be out in leaf.

At LEWISHAM, the 16th was cloudless; the 17th was cloudless till after 8 P.M.; the 18th, 19th, and 20th were principally overcast, and the sky on the 21st and 22nd was partially covered with cirrostratus cloud; a solar halo on the 21st and 22nd. The reading of the barometer decreased from 30.11 at the beginning of the week, to 29.53 by 3 P.M. on the 20th; increased to 29.83 by 9 A.M. on the 22nd; and decreased to 29.74 by the end of the week.

At ST. JOHN'S WOOD the 16th was fine; frost on the 17th; the 19th was overcast; a fog on the 22nd. Having placed out a night thermometer, made by Mr. Robinson, of Devonshire-street, Portland-place, for me many years ago, finding that the one I have been in the habit of registering from differed widely from it, led me to examine its several points, and I found the tube had been misplaced on the scale, amounting to, as near as possible, the difference, namely, 1.5 deg.; this I have taken off from this week's observations, but all rendered will require the same allowance. The one I register from was made by Newman.

At HARTWELL, sharp frost on the 16th and 17th; overcast on the 18th and 19th; and with frost on the 22nd.

At CARDINGTON.—The 16th and 17th hoar frost, bright sunshine, frosty air. The 18th and 19th were cloudy, windy, and mild. The 20th cloudy, slight rain in the afternoon. The 21st alternately cloudy and sunshine, bright and starry at night. The 22nd, hoar frost, very misty, sunshine. The lowest reading of a minimum thermometer on grass during the week was 13.4 deg. on the morning of the 17th; the highest reading of a maximum thermometer placed in the full rays of the sun on grass during the week was 77 deg.

At NORWICH, February 17th.—Rime in the morning, the day bright and cloudless; 18th and 19th were cloudy, with very high wind, and gusty; 20th cloudy, with wind, but not so violent as the preceding days; 21st, fair, a few light clouds only visible; 22nd, rime in the morning, fair and almost without a cloud the remainder of the day.

At NOTTINGHAM, 16th, sharp white frost, sunshine, few cumuli; 1 P.M., solar halo; 3 P.M., wind E., white stratus in the valley in the evening. 17th, sharp white frost, fine; bare north overcast; from 2 till 3.30 P.M., rain, then dull. 18th, rain in night; fine; windy afternoon and night. 19th, few drops of rain early, then fine; 20th, dull; starlight night. 21st, frost; fine with cirrostratus; from 11 A.M. till 3 P.M., solar halo; frosty night. 22nd, misty and frosty; heavy dew; fine day; from 11 A.M., till 4 P.M., solar halo; much cloud at sunset; starlight night; zodiacal light visible. The highest reading of the thermometer in the sun, was 79.5 deg., and the lowest was 19 deg. The meadows are blue over with the crocus blooms.

At GRANTHAM, fog on the 16th; haze on the 17th; Aurora light was seen on the 18th; and fog was prevalent on the 21st and 22nd.

At LIVERPOOL, 16th, A.M., haze and scud; P.M., clear. 17th, A.M., overcast with rain; P.M., overcast, stratus in the N.W. 18th, A.M., overcast; P.M., overcast with rain. 19th, A.M., overcast; P.M., overcast with light rain. 20th, A.M., overcast with rain; P.M., cirrus and scud; stratus in the N.W. 21st, A.M., hoar frost, and clear at 11 A.M.; two thirds of the sky covered with cirrus, cumulus in the S.W. horizon; P.M., clear, a beautiful day. 22nd, hoar frost, the sky covered with haze; P.M., hazy, evening clear in the zenith.

At MANCHESTER, the weather was frequently gloomy during the day, and the nights were frequently fine. In the week ending February 18th, there were in Manchester 125 deaths and 144 births; Chorlton-upon-Medlock, 15 deaths and 16 births; at Hulme, there were 28 deaths and 30 births; at Ardwick, 7 deaths and 19 births; at Salford, 29 births, and 60 deaths; and at Cheetham, 3 deaths and 7 births.

At STONYHURST, February 16th, very fine clear morning, red clouds at sunrise, cirrus in afternoon, evening clear and frosty; 17th, drizzle almost all day, thick fog in the evening; 18th, morning fair, cloudy, pelting rain in the afternoon; 19th, Driving rain all morning, afternoon fair, mild; 20th, wet till 9 A.M., rest of day fine, evening clear; 21st, morning frosty, very fine and sunny throughout the day, evening frosty; 22nd, fine, frosty, red cirrus at sunrise, cold and cloudy about noon, afternoon clear.

At GLASGOW, the 16th and 17th were fine; rain fell on the 18th and 19th; showers on the 20th; and frost on the 21st and 22nd; fog in the morning of the 22nd.

At DUNINO, February 16th, A.M. fine, P.M. fine; chilly evening; 17th, A.M. rime, cloudy, cumuli; P.M. clear and fine; 18th, A.M. heavy, mild gale; P.M. heavy gale; 19th, A.M. cloudy, heavy gale; P.M. gale abating; 9 P.M. streamers shooting from north; 20th, A.M. clear and squally; P.M. clear and fine; 21st, A.M. cloudless and frosty; P.M. clear and cirri; 22nd, A.M. cloudless and rime,

P.M. clear and fine. Viola odorata, crocus vernus, cheiranthus cheiri, and hepaticas in flower.

At JERSEY, influenza still prevalent.

At GUERNSEY, scarlatina more severe as the temperature lessens; no other predominant disease.

DAILY DIRECTION OF THE WIND AND FALL OF RAIN:—

Names of Stations.	FEBRUARY.							RAIN.		
	16	17	18	19	20	21	22	Fall in the week	Fall from 1st Jan.	No. of days in fall from Jan. 1.
Jersey	E. N.W. S.W. S.W. S.E. S. S.E.	...	...	...	...	...	...	in. 0.00	in. 4.720	...
Guernsey	N.E. S.E. S.W. S.W. S.W. N.E. N.E.	...	...	...	...	...	...	0.00	6.268	27
Truro .....	...	...	S.W. S.W. ...	...	...	E. S.E.	...	0.07	10.620	35
Exeter	S.E. E. W. W. W. N.W. S.E.	...	0.3 0.6	...	0.2	...	...	1.10	8.260	34
Southampton ...	S.E. S.E. S.W. S.W. S.W. N.E. E.	...	...	...	...	...	...	0.000	6.670	...
Uckfield	S.E. E. S.W. S.W. S.W. N.E. S.E.	...	...	...	...	0.06	...	0.060	5.230	25
Lewisham	E. W. W.S.W. S.W. W.S.W. N.E. E.	...	...	0.007	...	0.320	...	0.327	3.856	29
Greenwich	S. S. S.W. S.W. S.W. N.E. S.E.	...	...	...	0.20 0.10	...	...	0.300	3.214	27
St. John's Wood	E. N.W. S.W. S.W. S.W. N.E.	0.01	...	...	0.29	...	...	0.300	4.346	25
Hartwell	S.W. S. S. W. N. S.E.	...	0.005	...	...	0.149	...	0.154	3.345	21
Cardington	SS.W. S.W. S.W. S.W. S.W. N.W. N.E.	...	...	...	0.01 0.05	...	...	0.06	2.545	21
Norwich	S.W. S.W. S.W. S.W. S.W. N.W. N.E.	...	...	...	0.01 0.93	...	...	0.04	2.720	27
Nottingham	W.S.W. S.W. S.W. S.W. S.W. & N.W. & E.N.E.	...	0.028 0.018	0.003 W.N.W. N.E.	...	...	...	0.049	2.528	30
Grantham	S.E. W.S.W. W.S.W. N.W. S. S.S.E.	...	...	...	...	...	...	...	...	...
Hawarden	S. S.W. S.W. W. S.W. W.N.W. S.	...	...	...	...	...	...	0.00	3.900	21
Liverpool Obs...	S.S.E. S.S.E. W.S.W. W.S.W. N.W. N.N.W. E.S.E.	...	0.040	...	0.021 0.266	...	...	0.327	...	...
Manchester	S. S.W. S.W. S.W. W.N.W. S.W. S.E.	0.040 0.012 0.015	0.046	...	...	...	...	0.113	4.818	31
Wakefield	S. SS.W. S.W. S.W. W.N.W. S.W. E.S.E.	...	0.013 0.004	...	...	0.008	...	0.025	2.243	32
Stonyhurst	S.S.S.E. S.S.W. S.W. S.W. S.W. S.E. E. E.	...	0.045 0.371 0.212 0.199	...	...	...	...	0.827	9.660	36
Whitehaven	SS.W. S.W. S.W. S.W. N.W. N.W. S.	0.035 0.410 0.202 0.054 0.147	...	...	...	...	...	0.848	13.187	40
Glasgow	SS.E. S.W. S.W. S.S.W. S.W. S. W.	...	0.040 0.080 0.680 0.210	0.050	...	...	...	1.060	9.370	38
Dunino	S.W. SS.W. S.W. S.W. S.W. S.W. S.W.	...	...	...	...	...	...	0.00	3.900	23

At EXETER it is suspected that the fall of rain as here registered is incorrect.

At TRURO, catarrhs are prevalent, otherwise the town and neighbourhood are free from epidemic disease. Many old people and sufferers from chronic maladies have been cut off, more or less suddenly. Many cases have lately presented a sthenic inflammatory type, so that the lancet has been more in requisition than for a long time past.

At EXETER, some few cases of pneumonia.

At ST. JOHN'S WOOD, there is nothing particularly prevalent this week. Scarlatina and whooping-cough continue, also rheumatic affections, to a considerable extent, together with the usual amount of catarrhal complaints.—J. H. ROBERTS.

At HARTWELL, AYLESBURY, and neighbourhood, influenza was prevalent among children; diseases of the chest and respiratory organs, and whooping-cough are also prevalent.

At UCKFIELD, whooping cough, diarrhoea, influenza, and typhus are prevalent diseases.

At BEDFORD, cases of small-pox, typhus fever, and of acute rheumatism have occurred this week in Bedford and its neighbourhood.—T. H. BARKER.

At NORWICH, the character of the prevailing diseases the same as last week.

At GRANTHAM, a little scarlatina, two cases of remittent fever, two cases of ophthalmia, one of pneumonia, a little rheumatism; one case of apoplexy on the 16th; one of sudden death on the 21st from disease of the heart, aged about 60; another on the 22nd, aged about 79, cause of death not ascertained. Measles, generally speaking, mild, but many cases running on to croup. Bronchitis, influenza, and diarrhoea, have been prevalent throughout the week, one case also of typhus; catarrh has also been prevalent.

At WAKEFIELD, rheumatism and influenza have been very prevalent.

At GLASGOW, cases of influenza have occurred.

At DUNINO, bronchitis and croup have prevailed in this district; there have been several deaths from the latter disease.

During the whole of this week the reading of the barometer at Dunino and Glasgow has been much lower than at any other place; on the 16th, the difference was small; on the 17th, at Dunino it was 29.8 in., and at Jersey it was 30.3 in.; on the 18th, at Dunino and Glasgow it was 29.5 in., at Jersey it was 30.4 in.; on the 19th, the difference amounted to 0.8 in.; the reading at Dunino was 29.4 in., and at Jersey was 30.3 in., and by reference to the preceding rain table it will be seen that the fall of rain at Glasgow was large; on the 20th, the difference amounted to 0.5 in.; on the 21st, the difference was small; and on the 22nd, there was scarcely any difference.

The temperature has been very different at different places; on the 16th, in the centre of England at 9 A.M., it was 30 degs., while at the same instant it was 43 degs. both in latitude 49 degs. and 56 degs.; the same differences were shown on the 17th, and after this the temperature was nearly the same at all places.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

(From the Registrar-General's Report).

The following is the weekly return of births and deaths in London:—The mortality of the metropolitan districts, which in the preceding week had declined to 1,036, has risen to a much larger amount than is usual at this period; the deaths registered in the week ending last Saturday having been 1,213. Taking the ten corresponding weeks in the years 1841-50, the only example of a greater mortality occurred in 1847, when the deaths for the week were 1,253; while the average of the ten weeks was 1,067. Correcting this average according to the supposed rate of increase in the population, it becomes 1,164, compared with which the present return shows an excess of 49.

This increase, both on the previous week and on the average, runs through different periods of life, but is most considerable among persons of advanced age. Complaints of the respiratory organs have been more than usually active; and in this class bronchitis, which carries off the aged, numbers 119 persons, of whom 25 were children, 40 were persons between 15 and 60, and 54 had turned 60 years of age. Besides these, laryngitis and laryngismus stridulus were fatal to 7 children and an adult; pleurisy to 8 persons; pneumonia (or inflammation of the lungs) to 98, of whom 77 were children; asthma to 32; and other diseases of the lungs, exclusive of phthisis, to 12. The tubercular class of diseases, which comprises scrofula, tabes mesenterica, phthisis (or consumption), and hydrocephalus, also exhibits a slight increase on the previous week; the deaths in this return attributed to these diseases being in the aggregate 190, of which 137 were caused by consumption alone. By far the largest proportion of the victims of this destructive malady were of middle age, 116 out of the 137 having died between 15 and 60. Among those diseases of a tubercular character which are mostly confined to children, tabes mesenterica was fatal in 13 cases, and hydrocephalus (or water in the head) to 32. The average number of deaths simply described as arising from "fits" or "convulsions" is 50; and this week's table shows nearly the same amount.

At this period of the year the zymotic or epidemic class of diseases on an average causes about 200, or nearly a fifth part of the total number of deaths; and in the present return it contributes 208, which is near the usual number, though the proportion it bears to the total mortality is considerably less.

It is satisfactory to observe that small-pox now shows a tendency to become less fatal. Twenty-six persons died from it in the previous week; but that number has now fallen to 18. Vaccination appears to have been performed in only two of these cases. Two children, aged respectively 6 months and 11 months, died on the 17th of February in the Small-pox Hospital of confluent small-pox, both after 7 days illness, and "unprotected."

Hooping cough has increased, and now predominates among epidemics; 65 children having died from it in the week, which is considerably more than the average. Twenty-nine died of measles, only 9 of scarlatina, and 8 of croup. Typhus was fatal in 35 cases, of which 20 occurred in the middle period of life.

During the week, 130 deaths were registered which had occurred in workhouses, 13 in military and naval asylums, 40 in general hospitals, 3 in military and naval hospitals, and 9 in lunatic asylums.

The births of 792 boys and 775 girls, in all 1,567 children, were registered in the week. The average in six corresponding weeks of 1845-50 was 1,426.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 21st inst.:—Messrs. William James Broadwater, Cannon-street-road, St. George's-in-the-East; William Chaytor Beale, Kennington; Arthur David White, Winchester, Hants; Edward Bishop, Kirkstall, Yorkshire; William Frederick John Turner, Horton, Gloucestershire; Joseph Brady, Dewsbury, Yorkshire; John Deane Baker, Oakhill, Somerset; John Roulston, Helperry, Yorkshire; Charles King, Honourable East India Company's Service, Bengal; Thomas James Vallance, Stratford, Essex; and William Henry Sheehy, St. John-street-road, Islington. At the same meeting of the Court, Mr. Samuel Reginald Potter passed his examination as Naval Assistant.

OBITUARY.

On Saturday morning, the 22nd instant, Caleb Clarke, M.D., at his residence, Banbury, Oxon, in the 41st year of his age.

On the 17th ult., at York, William Travis, M.D., of Scarborough, in his 80th year, beloved and deeply regretted.

MILITARY APPOINTMENTS.

55th Foot.—Staff surgeon of the second class James McGregor, M.D., to be surgeon, vice George Alexander Stephenson, who retires upon half-pay; George Edwin Gains, gent., to be assistant-surgeon.

68th Foot.—John Francis O'Leary, gent., to be assistant-surgeon.

74th Foot.—William Warden, M.D., to be assistant-surgeon.

84th Foot.—Acting assistant-surgeon Hugh Melville Balfour, M.D., to be assistant-surgeon, vide Gosden, appointed to the staff.

92nd Foot.—Archibald Henry Fraser, gent., to be assistant-surgeon.

3rd Foot.—George Goforth Wyer, gent., to be assistant-surgeon.

HOSPITAL STAFF.

Staff surgeon of the first class Alexander Melvin, to be Deputy Inspector-General of Hospitals, vice John Kinnis, M.D., who retires upon half-pay.

Staff assistant-surgeon Francis Laing, M.D., to be staff surgeon of the second class, vice McGregor, appointed to the 55th Foot.

Assistant-surgeon Alfred Gosden, M.B., from 84th Foot, to be staff assistant-surgeon, vice Laing, promoted.

NAVAL APPOINTMENTS.

Surgeon John Findlay (1846) to the Alecto.

Assistant-surgeons Joseph Sloss, M.D. (1848), to the Alecto; Andrew McClure (1848), from the Indefatigable, to the Banshee steam-vessel, at Woolwich.

NOTICES TO CORRESPONDENTS.

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To all of these gentlemen the best thanks of the Editors are due; also to the Editors of several of the Provincial Newspapers, who have favourably reviewed our Journal.

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Credit is allowed for half the Annual Premium for the first five years.

The following Table exemplifies the effect of the present reduction:—

Age when Assured.	Amount Assured.	Annual Premium hitherto paid.	Reduction of 30 per Cent.	Annual Premium now payable.
	£.	£. s. d.	£. s. d.	£. s. d.
20	1000	20 17 6	6 5 3	14 12 3
30	1000	25 13 4	7 14 0	17 9 4
40	1000	33 18 4	10 3 6	23 14 10
50	1000	48 16 8	14 13 0	34 3 8

14, Waterloo-place,
10th May, 1850.

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Age when Assured.	Sum Assured.	PREMIUMS PAID.		Bonus added.	Per centage on Premiums Paid
		Number.	Amount.		
15	£3000	6	£315 0 0	£164 16 8	£52 6 6
25	5000	7	775 16 8	347 13 4	44 16 3
35	2500	6	431 17 6	183 18 0	42 11 8
45	2000	6	464 0 0	172 6 7	37 2 10

Annual Premium required for the Assurance of £100 for the whole term of life:—

Age.	Without Profits.	With Profits.	Age.	Without Profits.	With Profits.
15	£1 11 0	£1 15 0	40	£2 18 10	£3 6 5
20	1 13 10	1 19 3	50	4 0 9	4 10 7
30	2 4 0	2 10 4	60	6 1 0	6 7 4

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J. LODGE, Secretary and Actuary.

Printed by SYDNEY HEDLEY WATERLOW, of Gloster-terrace, Hoxton, in the county of Middlesex, at the printing-office of Messrs. WATERLOW and SONS, 66, London Wall, in the city of London, and published by THOMAS MARTIN, at the Office, East Temple Chambers, Whitefriars-street, in the precinct of Whitefriars, in the city of London.—Saturday, March 1st, 1851.

THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 10.

LONDON, SATURDAY, MARCH 8, 1851.

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ORIGINAL COMMUNICATIONS.

ON THE COMPARATIVE SIZE OF THE HAND OF THE ACCOUCHEUR AND OF THE FEMALE PELVIS.

By GEORGE KING, Esq.

Surgeon-Accoucheur to the Dorcas Society, Bath.

To the Editor of 'The Institute.'

SIR,—You will see that this paper was published in a recent number of the *Provincial Medical and Surgical Journal*, but as that journal is only circulated among the members of that association, and as the subject is one upon which very little has been written, I am anxious that it should have a wider circulation. The 'INSTITUTE' professes to be the organ of the General Practitioners, and to that class I belong, and as I believe the subject of this paper more particularly concerns us, I have sent it to you, with some additions, for republication, in order that it may be seen by the general body of practitioners in midwifery; and I hope you will not think that such an article would be out of place in a publication that professes to be their adjudicator and protector.

Yours, &c.,

GEO. KING.

Bath, February 22, 1851.

THE following observations on the size of the hand and arm in the practice of midwifery, and the size of the female pelvis and capacity of the outlet, may to some of your readers appear rather singular, and many others may feel and think as I do, that it is also singular, when we consider and observe the vast difference in the size and development of this important and useful member of the human frame, in those men we meet with who are daily engaged in practising in that delicate and peculiar branch of our profession. It is extraordinary that it has never attracted their attention, or been noticed by the various teachers and professors of the obstetric science, or the general practitioners of midwifery; and it seems also to be unobserved by all authors on obstetric practice, for we have published lectures and instructions, as well as manuals, for the assistance and guidance of the young beginner in the practice of midwifery, but in none of them have I been able to discover the slightest notice or reference to the size of the hand and arm, which is, and should be so considered, a matter of primary consideration, and ought to be noticed by them. They all give a most minute description of the various deformities of, as well as the diameter of, the outlet of the female pelvis, through which the hand is to be passed, and pages are written on the size and the choice of a catheter, or an œsophagus or rectum bougie, which is to be used for dilating those natural passages; but of the only instrument that can safely be used for the purpose of dilating the vagina, in order to get at the contents of the uterus, nothing is said. From the universal silence, we may be naturally led to think or suppose that all men's hands and arms are invariably of the same shape and size, and that, therefore, any allusion to it was useless and unnecessary in any catechisms or instructions that may be published or given to a tyro on his entering into this peculiar branch of the profession. Although midwifery is considered by the *pure* surgeon to be beneath his notice, and by others as a practice detached from physic and surgery, yet it partakes of both; and those who have made the medical profession their choice, and wish to rise in it, will find they must practice midwifery, and there is no part of our profession so likely to bring them before the public and into notice, as this. However degrading or derogatory it may appear to the *pure* surgeon to be thus engaged, the obstetric practitioner will find that in this department of his profession, not only his knowledge of the most intricate parts of anatomy and physiology will be required, but all his skill and energies, as well as moral courage, will be brought into action, in the performance of the most distressing and perhaps the most bold and difficult operations of surgery, and the most perplexing and frightful cases of the practice of medicine, and in those surgical operations the size of the hand will be of the greatest importance; yet it is unnoticed, and no one would for a moment imagine that there was any difference or variation in the structure and size of human beings, and that all men must naturally be of one uniform form and size, and that there was, or is, no such thing among the human race as giants or dwarfs, and large, bony, muscular men, as well as small, thin, and slender skeleton-like men. These proportions and differences in the form of the human frame are altogether passed over or forgotten by all writers and teachers of the obstetric practice. There are also persons practising medicine, and surgery, and midwifery, with monstrous large hands and arms, (as large as a sign-post,) while others have small delicate

hands, with very thin and slender arms. There cannot be a doubt as to which of these would be the fittest and ought to be selected for the practice of operative midwifery, and I consider that the former of these ought never to study, or if they did, not to make this branch of our profession their peculiar practice, being well assured that in very difficult or preternatural labours, when the introduction of the hand into the vagina is required for the purpose of altering the position of the fetus in utero, or for preternatural labour, they are physically incapacitated to render that assistance under such circumstances, with that dexterity and ease that the case demanded, and the patient had a right to expect; and I fear they would add greatly to the sufferings, if not endanger the patient's life, while the latter would be able to render great assistance, and effect much good, as well as to be the means of mitigating a vast amount of suffering. This being my conviction, I am induced to draw the attention of the general body of General Practitioners, and the readers of the 'INSTITUTE' to the subject, and will endeavour to show them that it is of vital importance, in a practical point of view, that a man-midwife should have a small hand. And I have no hesitation in stating, that those gentlemen who have such monstrous upper extremities as I have described, ought never to think of practising as accoucheurs, as they will be sure to fail in their attempts to relieve their patients in some of the most distressing preternatural presentations, and while they are waiting for assistance or a smaller instrument, the chances are that they will lose their patient. In order to illustrate the subject, and to prove the very great difference in the size and the measurement of the hands of some, I need only to draw the attention of the reader to a daily and familiar occurrence, which may be seen at any glove shop. In trying on gloves, what pulling and tugging, what stretching, there will be, and frequently laceration, in the many forcible and ineffectual attempts that are made in endeavouring to get a large hand into a small glove. I understand from the glovers that they keep what they call large sized men's and small men's; the largest measures *eleven inches*, and the smallest *eight inches* across the knuckles. What an awful disparity and difference in the size of an instrument, which is to be used indiscriminately, and without deviation or the least caution—as a dilator, and which is to be painfully forced through those structures living and partly forming the outlet of the parturient passage in those frightful, sudden, and urgent cases of flooding, &c., when there is no time for reflection, consideration, or substitution, for on its prompt and immediate application often depends the life of both mother and child. In all cases of protracted presentation, when it may be considered advisable or necessary to alter the position of the child in the uterus, the hand is the only instrument applicable or that can possibly be used for the purpose; yet we have no direction for the application of it, nor have the obstetric professors thought it of sufficient importance to inform their pupils whether a large one or a small one would be the best for use; nor is there any notice of the enormous difference in the size of them. Dr. David Davis, in his valuable work '*On the Principles and Practice of Obstetric Medicine*,' says:—"It is well known that the *hand*, when properly adapted to its object, is a much safer obstetrical instrument than any instrument that can be made." We all know that it is the indicator or eye of the practitioner in midwifery, and possesses a power far above all other instruments—that is, the property of touch; by this sensibility circumstances are made known, and the situation of the parts we are in contact with is conveyed to our minds, and by this all our movements and operations are directed, and our medical treatment regulated. Sir Charles Bell, in his '*Bridgewater Treatise*,' gives the following description of the human hand:—"The human hand is so beautifully formed, it has so fine a sensibility, that sensibility governs its motions; so correctly every effort of the will is answered, so instantly, as if the hand itself were the seat of that will. Its actions are so powerful, so free, and yet so delicate, that it seems to possess a quality—instinct—in itself; and there is no thought of its complexity as an instrument, or of the relations which make it subservient to the mind." This is a vivid and beautiful description of a perfect human hand, fully and properly adapted for all natural purposes as well as art. But all men's hands are not alike: they are not so beautiful, or so delicate, nor are they all so symmetrical as the one depicted by Sir Charles. They, therefore, are not all so well fitted for all the purposes for which they may be required to be used, and it is because I believe that an enormously large hand is a highly improper instrument to be used in many of the difficult and perplexing cases of midwifery, that I have been induced to make these remarks on the comparative size of the hand, with a view of drawing the attention of obstetric teachers and practitioners to it.

In all surgical operations we have the most minute directions given us as to the instruments to be made use of, as to shape and size, &c., and in all surgical works a description is given of them, and ample rules laid down for the selection of the most proper to be used, and their exact width, as well as length is particularly mentioned, and we have also the exact dimensions of the pelvic aperture, and we have also ample directions as to what sized fetal head will be likely to pass through it without assistance; but the outlet of the pelvis may be considerably diminished by distortion, and the inlet contracted, nevertheless, regardless of the size or consequences, the hand must be got through in order to find out what is going on at the brim; and it may also be necessary to put the hand up into the uterus, but whether a large hand or a small one will be best fitted for the operations in this diminished space we are not told. There may be, and we do often meet with a very contracted vagina, and this is to be overcome by sheer force, for there are no muscular fibres in this part to assist distension; the first application of the hand in the practice of midwifery is in the examination *per vaginam*, or as it is called by the old women, taking or trying a pain. This is done by introducing the forefinger slowly, and if we press with some degree of firmness on one side of the vagina, there will be less pain; if it is done more timidly it produces a tingling or irritation, which we should try to avoid. But this one finger exploring does not always reveal to us all that is going on, and often at this early stage of the labour, we may be obliged to pass up the whole hand, as the part presenting may still be above the brim of the pelvis. In such a case, the idea of an accoucheur with a tremendous hand and arm, to be in attendance on a delicate young girl, about 16 or 18, with contraction of the vagina, and with a flooding or preternatural presentation, is frightful, and the very thought of it to a person who has seen or had much experience in these difficult and monstrous cases, must make him shudder. The giving birth to a child being a natural process, it is not often that we have to interfere at all till the child is born; but being engaged and in attendance we ought, in every respect, to be fully qualified to act in all cases of malformation or complex labour. We all well know what a fuss there is made when a lady is likely to require the assistance of an accoucheur, as to who she shall have, and there are lots of consultations and inquiries among old aunts and cousins, old dames and washerwomen, and they all take into consideration the age, appearance, character, dress, habits, mannerism, family, &c., &c., and all they know and believe, but very little is thought of their skill and ability. It has often surprised me that these expecting ladies should never think of the size of the hand. It is a proof that they can have but little idea of what the accoucheur may have to do with them, and it is also singular that the old advisers should not think of it, as they must have known a little of the application of it themselves. I believe in cases of contraction of the vagina, when labour has been impeded in consequence of a cicatrix or any other cause, it has been recommended, and it may be sometimes necessary as well as proper, to divide it by a knife, in order to allow the child's head to pass, but I have never heard it recommended to reduce or shave a little of a man's hand or arm off, in order that it might with more ease pass; but if any obstetric practitioner, with a very large hand, and a great monster arm, in cases of contracted vagina or deformity of the pelvis, was rash enough to attempt to turn a child in utero, or detach an adherent placenta, he would in my opinion be a very fit subject for such an operation. We do not always find uniformity in the parturient passages of females; there is a vast difference in the capacity of the vagina and dimensions of the pelvis as well as in the size of the hand and arm. In some women we find the vagina large, loose, and flabby, and the outlet of the pelvis very large; such women will generally have very quick and easy labours, and we can be hardly ever in time to be present at the birth of the child. The place and the situation we occasionally find these patients in, would, if we did not know they were prudent and married women, lead us to suspect that they had some idea of concealment or evil intent. I have always thought that those unfortunate females who commit infanticide, or had been guilty of concealing the birth of their child, must belong to this class of women, having a large and well-formed pelvis, and a lax and capacious vagina, and consequently must have very easy and quick labours. With the first child it is not easy for a woman to distinguish actual labour-pains, with the pressing or bearing down of the child, from an inclination to have a motion; and the attack may be sudden and rapid, without intermission, till the child drops from them without the possibility of their having the power of controlling or stopping its exit, or of being collected enough to give an alarm until it was all over, the child being born, and they having got rid, as they suppose so nicely, of what had for so many months caused them so much trouble and anxiety, and

so suddenly and unexpectedly, which was contrary to all their anticipations, that they could think of nothing during the long period of gestation but the pain and difficulties connected with labour. After recovering the shock and surprise produced by the birth of the child, which had annihilated from the mind all recollections of the past, and rendered them incapable of thinking of the future, they would only think of the present, and in a moment of the greatest excitement and fright, finding themselves alone and thus far undisturbed, and the child quite prostrated, in a state of asphyxia from the fall or want of proper attention, they for the first time think of the unnatural crime of the destruction or concealment of the child, with minds in a state of the greatest agitation and excitement, and vacillating between shame, hope, and fear, and in this confused and frenzied condition, they are led to commit a most frightful and inhuman act, which had by them never been contemplated, and the very thought of such a deed half an hour before, in their calm moments, would have been the most revolting and horrifying to their feelings.

And I am disposed to believe that the size of the pelvis, and the capacity and structure of the parturient passages, are circumstances, considering the intimate connection, and action and reaction of the body and immaterial principles on each other, that have had much more to do with these tragical scenes than the organ of destructiveness, or concealment. In most cases of infanticide, all our attention is directed to the child in order to discover if there are any marks of violence, or any disorganization or injuries to account for its death. But the mother is considered a murderer and almost inhuman, and, shunned by her relations, is left only to the nurse, and often a policeman in the room or in attendance; little is thought of her condition or of any derangement or malformation of the pelvis through which the child has passed, or the altered condition of the parts engaged in the act of parturition. Women with a small pelvis, and a rigid, contracted vagina, and perhaps a large child, must naturally be a long while in labour, which will allow time for the disquieted mind to compose itself, and an opportunity for reflection on their condition and the consequences connected with it; and I have no doubt that then the moral and finer feelings will overcome the brutal. These poor creatures, long before their trouble, must have been told that the pangs of childbirth were awful and terrible to bear, and also have learnt, or had been given to understand, that the process of labour must be long, as well as painful and difficult; they, therefore, could not ever expect or have the least idea that they should be able to give birth to a child without its being known, and charity would lead us to hope that no female would premeditate the death of her own offspring. I have long determined never to give such evidence, in any case of prosecution, as would be likely to convict a woman of infanticide, unless it was very clearly proved to me that it had been premeditated, and that no preparations had been made for it before the birth of the child!

I believe there is no rule of law that can prevent or restrain a professional man, when in the witness-box on such momentous occasions, from taking into his consideration probabilities as well as facts, of which *he* is, professionally, best able to judge. But the indecision of medical witnesses is so generally known by juries, that verdicts are frequently returned in direct opposition to their testimony.

There is a case related in the *Lancet* some years back, of a medical man being requested by a magistrate to examine a young woman who had been suspected of giving birth to a child. She was examined by him six days after the child had been born. His evidence was, "That he found her vagina rather relaxed, so as readily to admit the whole hand," and this evidence was brought forward and intended to convict the woman instead of, as I think, acquitting her. The vagina, if not immediately, very shortly after delivery contracts to its natural state and calibre, and if six days after the giving birth to a child there was room to admit the whole hand, there must have been the usual capacity of the vagina, and no proof of recent delivery. This is a point of very great importance to those who may be called to give evidence in proof of recent delivery, and deserves their most serious consideration. Writers on Forensic Medicine tell us, that the external parts of generation exhibit signs of recent delivery for days after, and even in some instances a week. After a woman has given birth to a child, we may find the vagina relaxed and easily dilated, and its internal surface smooth from the obliteration of the rugæ, and that the labia would be also tumefied and inflamed; but all this could only occur after a long and very tedious labour, where the child's head had been a long while in the passage pressing on the perineum. In sudden and rapid labours the child is, by the powerful action of the uterus, and in consequence of the capacity of the pelvis, and absence of the usual constricting powers of the outlet, shot through the vagina with

that rapidity and almost painless velocity that, I believe, scarcely any inconvenience or disorganisation can be or is produced in the child's passage into the world, and that on examination of the vagina even *two* hours after delivery, we should find the rugæ, and the parts engaged in expelling the child, in their natural state; and there would be much difficulty in such cases in proving that a woman had recently given birth to a child, by the appearance of the external organs of generation.

The following cases will tend to illustrate the latter part of this subject, and will show, as well as prove, how quickly and suddenly some women will give birth to a child. Those who have been much engaged in obstetric practice, must have been called to many sudden and rapid labours, and have, no doubt, witnessed some curious and frightful scenes, and have been, like myself, surprised and astonished with what rapidity the parts which are engaged in expelling the child yield and dilate. As facts are generally valued above hypotheses, I will just name two or three out of the several cases of easy parturition that have occurred in my own practice. In order that they may be understood I must also relate some of the circumstances connected with them.

Some years since, a young man called on me to know at what hour in the evening a female friend of his could see me. I fixed the time, and, at the appointed hour, a very respectable-looking young woman, about 20, called on me. She was living in a family as lady's maid. She introduced herself by saying that she believed a friend of hers had called on me, and knowing the object of her visit, I put such questions to her as I then considered necessary, in order to ascertain the situation she was in. She did not seem to be very well versed in such matters, and I had some difficulty in getting out of her what I wished to know; from what I did elicit, I thought her to be about eight months gone in the family way, and this I told her, which appeared to surprise her much, and she became much affected, sobbed out she had hoped it was not so, and left my surgery very much depressed, without telling me where she lived or who her friend was. Early on the following morning her young man called on me to say that I was quite right, his friend was in the family way, and that she had had a child in the night, and he came to know what they were to do with it, as it was dead, without entering into any particulars as to what had happened in the night. I gave him directions as to how still-born children were usually buried. He was also to tell me that the young woman would call on me in the evening, which she did, and from her I got the following account out of her about her labour, which, from her manner and natural simplicity, I believe was the truth:—After she left me the preceding evening she went to bed at the usual time, had no pain except of mind from what I had told her; her bedfellow was the housemaid, and she slept with her that night. She thinks she had slept about three hours, when she awoke up with great pain in the lower part of her bowels, with an urgent desire to make water; she got out to the po and could not get off again till the child was born; she thought that she was on it about ten minutes. I asked her if the child cried; she replied no, but it had a good deal of hair on its head. Not being a coroner or a judge I did not consider that I had a right to ask any more questions. I gave her an anodyne mixture, and advised her to take very great care of herself. She had that day waited on her mistress at dinner; she did very well, and got through it without being detected, in a house where there were several other female servants. Her milk was very troublesome for some weeks. She had been seen almost daily by her lady's medical man, and he had frequently prescribed for her, without discovering what was the matter with her. The most astounding part of this affair is, that the birth of a child should have taken place by the side of the bed without rousing her fellow servant, no means having been used to prevent her knowing what was going on; mesmerism and chloroform were not so much in vogue then as they are in the present day. This woman is now married, and I have attended her with six children since, and out of the six I was only in time to be at the birth of one, although I was always sent for directly she was taken in labour, the distance not being far, and the messenger generally found me at home. With the first after her marriage she was taken in the kitchen, and had but one pain, and the child was born before she could be got up stairs.

The second case, a young girl about 18, called on me late on a Saturday evening, to tell me that she thought that she was taken unwell. I had not seen her before for several months. She had then consulted me on the subject of the suspension of the menses. While talking to me she complained of a sharp pain at the lower part of her stomach, with rather a queer look, which plainly portrayed what was going on; and although I am not a physiognomist, I think I have practice enough in midwifery to understand the

physiognomical signs of the face during labour-pains, so as not to be mistaken; I therefore gave her to understand that she was in labour, and soon packed her off home, as I clearly saw that there was a chance of my having an increase in my family, and a possibility of both doctor and patient being suspected of having contemplated the concealment of the birth of a child, not having made any preparation for such an event. About an hour after she left my house, I was sent for in great haste. Her young man let me in, and then set off for a friend. I found her alone, sitting up in bed, hushing a baby, which she had laid across her abdomen; it was crying lustily, with the placenta still in the vagina, and the umbilical cord not divided. I separated the child, and removed the placenta. While I was dividing the umbilical cord, she said, "I didn't have much pain when the child came into the world." I remained with her till a neighbour came in. This young woman was living with her uncle; the poor old man could think of nothing but the cholera, and was below puffing away with the bellows to get some water hot. The old man's auditory nerve was not so sensitive as it had been fifty years before, therefore he did not hear the crying of the little brat. It was removed in the morning, and he knew nothing of what had taken place in the night. The girl did very well, and got married directly she was able to go out. The first child after the marriage also came into the world in a hurry. I was not in time. With the third, she had been out for a walk, and on her return went up stairs to the po, and the child popped into it; the po being half full of water, the child was suffocated. Although there were two or three females in the room with her, they were too terrified to lift her off and remove the child, but kept her in that situation till I came to her assistance.

The third case. One night last winter I was called, unexpectedly, to a married woman in an adjoining street, who had had two or three children. I found her sitting on the edge of the bed, very faint, and a child and the placenta attached, lying on the floor, and a large pool of blood across the room. The women who came in to her assistance were so aghast at the sight, that they became powerless, and could do nothing, as they said, till the doctor came. I did what was necessary. The account this woman gave me was, that she was aroused up from her first nap with a pain and an inclination to make water, and she was stooping down to get at the po, when the waters broke, and the child and the after-birth came away together, with one slight pain. Her husband was in bed; he immediately got up and ran for me, and left his wife by herself.

Such instances as these are numerous, and they most clearly show that women who have such quick and easy labours must have a large and well-formed pelvis, and the vagina and external parts must also be very relaxed, and easily dilated, which is a most satisfactory and convincing proof that during the act of parturition such women can have but little or no contracting power over the outlet, and this is, I believe, the cause of so many children suddenly passing through life into a faecal repository, where they may be asphyxiated and die.

There was a remarkable instance of easy delivery published a few years since by a French physician, that occurred at Arras, in France. A woman, 22 years of age, in the last month of her pregnancy, was suddenly affected in the night with acute pains in the abdomen, and considering it was what is called a bowel complaint, she immediately proceeded to the *garde-robe*. She had scarcely taken her seat, when the child was expelled *without any pain*, and she declared *she was totally unaware of what had happened till she heard the child cry*. This is the only case that I have met with recorded of a woman having a child *without pain*. Children that come into the world so rapidly do not generally cry.

There is a case in a late number of the *Provincial Medical and Surgical Journal*, related by John Gregson Harrison, Esq., M.D., of Manchester: he states that he was engaged to attend a lady, aged 34, in her first labour, and "was hastily summoned to her house early in the morning; but on arriving there I was informed that the child was born a few minutes previously to the messenger leaving her, and that the infant was dead. On making inquiries I found that my patient, thinking she had a desire to use the night chair, attempted to make use of it, and then voided what she supposed to be the liquor amnii, and sat there some time afterwards, feeling much indispensed; but, on getting into bed, she saw, to her great astonishment, the child lying in the vessel quite dead. She declared most positively that she had experienced no pain, and was quite unconscious of the exact state of her position. I weighed the child and found it to be six pounds and three quarters, and full grown. The mother had completed her full time of reckoning."

I have related these cases of sudden delivery with the humane view of showing, that at least some of the instances of children

having been deposited in privies might have been accidental, and the parturition being nearly free from pain, the female might not have been aware of what had happened. I believe that many a poor girl has been overtaken with labour unexpectedly, and from not having been prepared for such an event, and the child dead, she is at once suspected of infanticide, and dragged into a criminal court of law, and arraigned before a jury for an act of supposed crime, over which she had not the least command, or power of controlling.

Although this is a subject that belongs to the obstetric department only, it may sometimes become a medico-legal question, and is, I think well worth the notice of professors of medical jurisprudence, for in some cases of infanticide and concealment of the birth of a child, it may be very properly adduced as mitigating evidence, and directing the medical men's evidence more to the state of the mother.

Should you concur with me that this, as well as the size of the hand and arm, in the practice of midwifery, are subjects that have been neglected or overlooked by teachers and obstetric practitioners, you will perhaps allow their attention to be directed to it by the insertion of my remarks in an early number of the 'INSTITUTE.'

Bath, February 25, 1851.

To the Editor of 'The Institute.'

DEAR SIR,—Of the following "curiosities" of medicine, which I send for the amusement of your readers, the first may not be uninteresting to the ingenious author of your *Archæology*. It is an Edinburgh Apothecary's bill of a century and a half ago, by which you will see the style of "Chirurgion-Apothecary" was already in use in the northern metropolis. I may observe, incidentally, that the greater part of the medical practice of Scotland is in the hands of the Edinburgh M.D.s, who practice indiscriminately, and for the most part dispense their own medicines; but do not make their charges in the form of an apothecary's bill, or at least, the most respectable practitioners do not.

No. 1.

"Accompt John Lamie,

To Robert Clerk Chirurgion Apothecarie.

Begun December 1698.

£ s. d.

1698 Decemr. 9, impr., three handfulls of cardus	00:03:00
5th, twelve ounces of a cephalick electuarie.	07:06:00
1699 Feb. 26th, ane ounce of a specifick tincture	01:05:00
March 1st, ane ounce of the opodeldoch oymntment	00:08:00
" 6th, two pounds of a pectorall tincture	06:03:00
" 9th, twelve doses of pectorall and anodin pils	02:08:00
" 13th, two ounces of the oymntment as before.	00:16:00
" 17th, six ounces and a half of consirve of roses	01:01:00
	19:10:00

Ed^o., May 5, 1701. Then received full payment of the within written accompt, and of all precidings be me, Robert Clerk."

This apparently exorbitant "accompt," becomes very moderate when reduced to "Punds Scots."

My next will perhaps suit the taste of your valuable correspondent, the exponent of the enormities of the inflictions on the patience of medical men now practised under the sanction of the poor-law. The conceit of the rural Dogberry cannot altogether obscure the touch of benevolence which ruled the Vestry when "the order" was given. The note is written in a clerly hand, and was probably the work of the *shopkeeper*, whose rule over country parishes was one of the abuses which was rectified by the operation of the new law.

No. 2.

Mr. —
Sir,

Whereas the bearer the wife of John Potter poor man of our parish his ^{sd} wife have been much afflicted for some time of a very turbulent disorder breaking out, and have cost them money & expence by apply^g to person's for Cuer, which to no effect—yesterday she apply^g to us officers—that they was not in ability, to support the expence any longer for her Cuer, and to support family) therefore for this reason we send her to Mr. — to know where can give her any assistance for Cuer or not &c.

We am S^r y^o obed hble Sery^t

L— 16 Sep^r 1779. EDW. JENDEN.

My next dates about five and thirty years ago, and is a neat specimen of the simplicity of Parisian practice, of the *médecine expectante* school.

No. 3.

"Prenez un quart de poulet maigre, faites bouillir pendant deux heures, pour en prendre trois tasses le matin.

"On ajoutera dans chaque tasse un demi gros de sel d'Epsom."

With much more respect I approach the following, which is the written instructions of a foreign physician, who enjoyed a European reputation about five and twenty years ago, to a young English traveller, whom he perceived to be too little conversant with the French language to be trusted with a prescription in that tongue. It is to be remembered that this was written by a man who had studied in Great Britain, and was witness to the extravagance of the calomel and blue pill manias of the palmy days of Currie and Abernethy, and the murderous purgations of the Hamiltonian school of practitioners.

No. 4.

"Without entering into any discussion of the nature of the obstruction of the intestine, more likely near the cæcum, I should advise to Mr. — not spa water, which is a too stimulating remedy, but a common water, rather more than look-warm temperature, pumping (*Douche tombante*) and one (*Douche ascendante*) or injecting one like a glisten: the components of both these pumpings must be different, and most commonly we use a slight decoction of dulcamara for the last of such like, this produce some stools, without any pain whatsoever; these are to be taken every other day, going to bed after for an hour or two; these must be begun immediately, used for a month, left aside some weeks, and begun again, and so on; then at spring and autumn *les sucs d'herbes* should be employed. You ground in a marble mortar water cresses, and equal part of *dent de lion*, you strain; take dose 2 or 3 ounces of this pure juice in a cup of hot boiling veal-tea (*bouillon de veau*) or chicken-tea very early in the morning, being at bed, as much one hour or two after; then from 4 to 6 ounces every morning during 4 to 6 weeks every season, spring and autumn; but every 3rd day you add to the first cup 30 grains of rhubarb, and 2 dragsms of any salt, such as Epsom salt, or phosph. sodæ, a sufficient dose to produce 3 or 4 stools. That morning any tisane is to be drank to help the physic. Among mineral waters—we have a great experience of their use—in this part of the world (Geneva). We seldom send to spa such patients, but always to *Plombières dans la ci devant Lorraine*, mineral waters remarkable by their good effects on such disorders.

"As for mercury, which no doubt is a powerful remedy, is there not much abuse of it in England, either in the facility it is ordered in every kind of *obstruction*, and almost at any season of the year? Is not calomel tho' altho' a powerful remedy, especially in Indies,* *une salle à tous chevaux* (?) in England? Are there not some periods in such disorders where it should not be employed? Are there not some remedies, or other way of a rational treatment now-a-day too much fall in desuetude in England. I beg excuse for these doubts, which twenty-five years of full practice in a country where any kind of obstruction are common, embold me to put in question.

Médecin-en-Chef, &c., &c."

With much regard, I remain, dear sir, yours, &c.,

P. P.

MEDICAL INTELLIGENCE.

EPIDEMIOLOGICAL SOCIETY.

March 3rd, 1851.

Dr. BABINGTON, President, in the Chair.

SOME ACCOUNT OF THE YELLOW FEVER EPIDEMY, BY WHICH BRAZIL WAS INVADDED IN THE LATTER PART OF THE YEAR 1849.

By J. O. McWILLIAM, M.D., F.R.S.

Dr. McWILLIAM opened the subject of his paper by taking a rapid glance at the more prominent physical features of Brazil, noticing the great extent of territory comprehended in that empire: the division of its surface into high central table lands, traversed by serrated mountain ranges, and lowlands which bounding the southern part of the country, sweep along its outer side or sea-board, and then taking a northerly and westerly course, continue low and inclining as far as the rich and vast plain of the Amazon.

Notwithstanding that Brazil is situated in chief part within the

* This is obscurely written, but it appears to be as above, *une salle à tous chevaux*.

southern tropic, and that its soil abounds in those conditions which theoretically are supposed to induce yellow fever and other tropical diseases, the whole country had hitherto been remarkable only for its surpassing beauty and salubrity.

Yellow fever might rage in the neighbouring countries, the Guyanas, but until 1849, the equator had, at all events, for nearly a century, been considered the barrier against the progress of that pestilence southward.

In 1849, however, the yellow fever passed this boundary, and first appeared at Bahia, situate in 13° south latitude, next at Pernambuco, in 8° south latitude, and then at Rio de Janeiro in 22° 53' south. It afterwards spread north and south to many of the other parts of the empire, not however in the ratio of their proximity to each other, but in the ratio of their greater or less intercourse with the parts first infected.

The evidence of the importation of the disease into the three chief ports of the empire by infected vessels, although not of a nature so absolute or so positively demonstrative as in the case of the "Eclair" at Boa Vista in the Cape de Verde, is still considered by Dr. McWilliam so highly presumptive, that, backed as it is by the previous immunity of the country from yellow fever, by the large fact that nowhere in these ports did fever appear before the arrival of a vessel that had either suffered from the disease or had left an infected port, by the many instances of positive contagious propagation which were manifested during the progress of the epidemic throughout the country, and by the important circumstance that ports which vigorously enforced quarantine, and ports having no intercourse with infected places, entirely escaped the disease, seem to leave no doubt as to the recent Brazil epidemic being of foreign origin.

At Rio de Janeiro, it appears that when people infected with the fever fled to an elevation of 3,000 feet, and even less, above the sea level, the disease was speedily annihilated, and none of the mountain residents were infected, a fact quite in accordance with what was observed by Humboldt in Mexico. "The farm of L'Encero," says this great "oracle of nature," "3,043 feet above the ocean, is the highest limit of the 'vomito,' and the inferior limit of the oaks, and warn the colonist who inhabits the central table land, how far he may descend towards the coast without dread of the mortal disease, the 'vomito.'"

Judging from the whole tenor of the evidence, Dr. McWilliam is of opinion that the following conclusions are fully borne out.

1. That the Brazil yellow fever epidemic did not arise from endemic sources.

a. Because, notwithstanding the presence of supposed endemic causes, yellow fever has been for nearly a century unknown in that country.

b. Because places where endemic influences were most abundant escaped altogether.

2. That the epidemic did not depend upon any general morbidic agency either stagnant in, or travelling through the atmosphere.

a. Because, while some places were affected by the fever, others near to them, and under the same conditions of soil and climate remained free.

b. Because the disease sometimes followed the course of the south-east trade wind, and at other times travelled in the teeth of that wind.

3. That the evidence of the importation of yellow fever into Bahia, Pernambuco, and Rio de Janeiro, although not of so absolute and positive a nature as the case of the "Eclair," at Boa Vista, in the Cape de Verde, afforded, is still so strongly presumptive as to warrant the belief that the disease was a foreign introduction into these and the other parts of the Brazilian empire.

a. Because each of these ports was healthy before the arrival of a vessel with yellow fever, or from an infected port.

b. Because after the appearance of the disease on shore, its spread was in accordance with the law of contagious diseases; and because positive evidence of contagious propagation was manifested in several cases.

c. Because ports having little or no communication with infected places, and ports at which quarantine measures were adopted entirely escaped the disease.

Lastly. Yellow fever, unlike cholera and typhus fever, which may prevail at ordinary and even at extraordinary temperatures, requires a high temperature for its maintenance. It is even driven from the flats of intertropical Mexico between the months of November and March, when the mean heat does not exceed 71° Fahrenheit. Whenever the disease has prevailed in the Old World, it has always been preceded by a season of unusually high temperature. The mean temperature of the hottest month in England does not exceed 61° 3' Fahrenheit.

Hence experience warrants the conclusion, that yellow fever, even if introduced into this country, can never find even a brief abiding place here.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 25, 1851.

Dr. ADDISON, President, in the chair.

CASE OF SMALL-POX RECURRING A THIRD TIME AFTER VACCINATION, WHEN IT PROVED FATAL.

By JOHN WEBSTER, M.D., F.R.S., &c.

AFTER alluding to the fact, that hooping-cough, measles, and scarlatina generally occur only once during the lifetime of an individual, exceptions, nevertheless, to the above rule, as well in these complaints as in small-pox, have been recorded by authors. Three well-marked examples of the recurrence of small-pox, met with in the same family, are related, one of which terminated fatally. The case especially referred to by Dr. Webster, was that of H. N. N., who had been vaccinated satisfactorily in 1827, when three months old. Notwithstanding this circumstance, he was attacked by small-pox in 1833, along with an elder brother, who had been likewise vaccinated. Both patients recovered, and nothing more was thought of the matter till 1838, when the two lads were again attacked by variola, along with another—that is, a third—brother, likewise regularly vaccinated. However, all three got quite well in due time. Subsequently, Mr. H. N. N., whose case is now just mentioned, went to India in the Company's service, where he was seized, in April last, with the usual and well-marked symptoms of small-pox, which soon became confluent, and proved fatal at Dharwarin, on the 13th of that month; this making the third time this gentleman had been attacked by variola, although previously vaccinated.

CASE OF CONFLUENT SMALL-POX AFTER A THIRD VACCINATION.

By Dr. A. P. STEWART.

A GENTLEMAN, 25 years of age, who had been five years apprenticed to a gentleman in extensive general practice in Devonshire, had been most successfully vaccinated when six months' old. Requiring to attend variolous cases, he had the operation repeated in July, 1849, without effect, and again in May, 1850, with much irritation, inflammation, and swelling of the arm, the lymph from the vesicle not communicating the disease. He came to London to begin his medical studies on the 13th of October last, having been exposed to infection the same morning. The train of premonitory symptoms set in on the 15th, and was followed (on the 17th) by the appearance of a closely-packed eruption of papulae all over the body. For four successive nights, mild delirium was present; but the sore throat and conjunctivitis occasioned by the presence of vesicles, were quickly relieved by the application of a solution of nitrate of silver; and the pulse, previously as high as 120, never rose above 100 after the seventh day. The vesicles, though very numerous on the hands and feet, caused little or no pain; on the eleventh day of disease, and the seventh of eruption, they were at their height, and, in the course of the next two days, had nearly all dried up and scaled off, with very trifling discharge. Thereafter convalescence went on rapidly. In the district where the subject of this attack resided, the popular prejudice against vaccination has always been so strong, that for a number of years it has been much neglected; and the parents are still in the habit of inoculating their children. During the last nine months it has been practised to a very large extent, with so much secrecy as to defy the utmost efforts of the authorities to obtain legal proof, and with the effect of keeping up the disease during many months, and spreading it abroad over the whole district. It was introduced in April by a sweep boy, who took it in a town not far off, and returning to his family, communicated it to his unvaccinated brothers and sisters. The latter, again, going to a lace school, infected several of the other children, after which it spread rapidly in all directions. Several instances were adduced, as examples of a large number in which inoculation had entirely failed to protect those who had been subjected to it from secondary attacks; besides the case of a lady of title, whose mansion was in the infected district, and who had lately had a second attack of natural small-pox. The author then stated, as the result of his and Dr. A. Anderson's experience in the Glasgow Fever Hospital, from November, 1836, to November, 1838, that, of the 126 cases admitted, 31 were vaccinated, 52 doubtful (consisting of unvaccinated, with a sprinkling of imperfectly vaccinated patients), and 43 unvaccinated. The mortality

among the "doubtful" was 1 in 3.06, or 32.7 per cent.; among the unvaccinated, 1 in 2.86, or 34.8 per cent.; while among the vaccinated it was only 1 in 31, or 3.2 per cent. The author concluded his remarks by adducing his experience in the north-west district of St. Pancras parish, during the epidemic of 1845. Those who had been successfully vaccinated, both children and parents, though exposed night and day, in their unventilated dwellings, to the concentrated infection of the disease in its worst forms, were proof against it; while those in whom the evidence of success was doubtful, were not proof against the milder forms, and very often took the disease from convalescents whom they met in the open air. The author concluded, with Chomel, that "we cannot fairly expect more from vaccination than from small-pox itself."

(To be continued.)

THE MESMERISTS AT THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday sennight a singular attempt was made by the mesmerists to arrest the ordinary business of the evening, and to bring on a discussion on mesmerism, which was, however, frustrated by the firmness of the presiding President, supported by all the Fellows present. Some years ago the council permitted a paper to be read there, describing the amputation of a limb under the supposed influence of mesmerism. This was made a great card by the Mesmerisers, and frequently quoted in support of their opinions. At a subsequent meeting of the Society the minutes of that proceeding were expunged from their books, and still more recently, during the present session, in fact, Dr. Marshall Hall announced that he had had proof that the man operated on was an imposter. This naturally galled the relaters of the case, and on Tuesday night Dr. Ashburner, after the minutes were read, got up and addressed the meeting on the subject, but was called to order by the President, who said that the case was a matter now between those gentlemen and Dr. M. Hall, but it would be quite irregular to discuss it further at that Society. After some demur Dr. Ashburner sat down, but a Mr. Cohen was not so easily put down. In spite of the stringent opposition of the Fellows present, and the repeated intimations of irregularity from the President, he persisted in speaking for several minutes, although not a word could be heard, his voice being drowned in the calls to order, &c. At last Dr. Copland came to the rescue, and told him he was insulting the Society by his conduct, and a sense of the indecency thereof then seemed to strike him, and he resumed his seat. Although we have had many years' experience of Medical Societies, we do not think we ever before witnessed such a scene. If Mr. Cohen be a Fellow of the Society, he should be called upon to apologize.

MEDICAL SOCIETY OF LONDON.

February 22.

DR. BENNETT, President, in the Chair.

CORRODING ULCER OF THE UTERUS.

Dr. Henry Bennet presented to the Society several pathological specimens of uterine disease, and a wax preparation, illustrating inflammatory ulceration of the cervix uteri. The latter had been taken from a cast, and coloured from life by Mr. Tuson, of University College. It well illustrated the disease, which he had described in his writings as ulceration of the cervix uteri, a morbid state to which some persons had lately attempted to apply the nondescript term of granular inflammation. It would be perceived that the wax model presented the characters which classical writers had ascribed to ulceration, "a granulating surface secreting matter." (Sir Astley Cooper.) "A solution of continuity in any soft part of the body, attended with a secretion of pus, or some kind of discharge." (Samuel Cooper.) There was no appearance of loss of substance, it was true; but on examining one of the macerated uteri then shown to the Society, it would be seen that the cervix which had been ulcerated during life presented very evident destruction of tissue, the mucous membrane having been destroyed in places, so as to reveal the lamellated structure of the submucous tissues. The other uterus was a very interesting illustration of corroding ulcer, kindly forwarded to Dr. Bennet by Mr. Highmore, of Bradford, Wilts. This disease was one of rather a mysterious character, the ultimate structural nature of which had not yet, he believed, been satisfactorily made out. Mr. Highmore had given him the following details:—The patient, aged 48 at her death, was the mother of eleven children, the youngest of whom was

born when she was 43. In 1847 she became subject to leucorrhœa and uterine hæmorrhage, which confined her for months to bed. In 1848 she went into the Bristol Infirmary, where the vagina was repeatedly plugged to arrest hæmorrhage, but no examination was made. Mr. Highmore saw her in May, 1849, and examined her with the speculum. He detected a diseased condition of the cervix uteri, which presented a fungous granular mass, about the size of a walnut, projecting from the os uteri. The disease resisted cauterisation, and progressed in spite of local and general treatment, until the patient sank from exhaustion, November, 1850. On examination of the uterus, now before the Society, it will be found that not only the cervix, but a considerable portion of the body of the organ has been destroyed without any apparent deposit of new matter, or thickening or induration of what remains. The healthy uterine tissue ends abruptly in a jagged surface, as if it had been eaten away. The rectum and bladder are both extensively ulcerated, so that the three cavities communicate freely, forming a kind of cloaca. Dr. H. Bennet had submitted the uterus to his friend Dr. Quain, in order to have his opinion respecting the microscopical anatomy of the diseased tissues, and had received from him the following important memorandum:—"On examining portions of the soft jagged substance taken from different parts of the ulcerated edges of the body of the uterus, I find the appearance in all pretty nearly the same. That is to say, the substance consists of—1. A loose, fine, filamentous or cellular tissue. 2. Particles of fatty matter, in some portions very abundant, and both free and imbedded in the tissue. 3. Crystals of the earthy phosphates, of the form of prisms, stars, or leaves, some free, others inclosed in the surrounding substance. 4. A few small cells containing granules, free granules, and broken-down fibres, I do not observe any trace whatever of cells, fibres, or other matter, which could connect the morbid process with cancerous disease. Nor, on the other hand, is there any appearance of plasma or other substance, by which the disintegrating process could be restricted or repaired. On comparing this substance from the surface of the ulcer, with the deeper and healthier tissue of the womb, I am led to infer that the difference found in the two depends on a process of decay or disintegration taking place slowly, without any capability of the surrounding parts to restrict the process, or to restrain its effects. On what this want of power depends, or what may have been the primary existing cause of the disease, is a subject of interesting inquiry." In this latter remark of Dr. Quain, Dr. H. Bennet fully agreed, and he thought the results of the microscopical examination of this case of corroding ulcer of the uterus would be listened to with interest, as he was not aware that this most valuable mode of investigating the intimate structural nature of disease in the animal tissues had been applied to the disease in question. Professor Bennett, of Edinburgh, classes it among the epithelial canceroid growths, but did not appear to have examined it. The crystals might be owing to the urine. The filamentous cellular tissue found at the ulcerated edge showed that disease developed cellular tissue in the uterine tissue so as to render it visible, but did not prove that it existed in a demonstrable form in the non-pregnant uterus, although he was very willing to admit that the microscope might prove such to be the case.

ON DIARRHŒA AS A HITHERTO UNNOTICED SYMPTOM OF MENSTRUATION.

AND ON THE USE OF PURGATIVES AT THE DIFFERENT EPOCHS OF THE MENSTRUAL FUNCTION.

Dr. Tilt read a paper on diarrhœa as a hitherto unnoticed symptom of menstruation, and on the use of purgatives at the different epochs of the menstrual function. He premised that, not having found a description of catamenial diarrhœa in the classic works of Friend and Brierre de Boismont, he concluded it was not generally known to the profession. He then proceeded to inquire into the nature and frequency of that catamenial diarrhœa—whether it occurs,

1. At the prodroma of menstruation.
2. During its regular establishment.
3. At its cessation.

1st. As a symptom of the prodroma of menstruation, diarrhœa scarcely ever occurs. Dr. Tilt noticed it but once in 161 cases.

2ndly. As a symptom of regularly established menstruation it occurred in 88 instances out of 161 women carefully interrogated relative to this point. It did not occur in 73 instances. In those cases in which it was present, it preceded the menstrual flow in 45 cases, accompanied it in 31, both preceded and accompanied it in 10, and in two instances it neither preceded nor accompanied it, but, on the contrary, habitually for two days followed the menstrual flow. In the cases of precursory diarrhœa, the bowels were in general constive until the cessation of the catamenia.

3rdly. As a symptom of menstruation at its cessation, diarrhoea was much less frequent than is generally believed, for it was only found in 8 per cent. of such cases.

With respect to the nature of the diarrhoea, it is generally unattended by pain, but sometimes nausea and slight colics precede it for two or three days. In one patient, these symptoms habitually lasted eight days previous to the appearance of diarrhoea. When it occurs at the change of life, it generally appears at irregular intervals; it may, however, adopt the regularity of the menstrual function. As a general rule, however, when diarrhoea has habitually accompanied menstruation, there is at the change of life a gradual diminution of both discharges, the cessation of one marking the termination of the other. Thus Dr. Tilt affirmed, that as a prodromic symptom, diarrhoea scarcely ever occurs; that it is found in 8 per cent. of cessation cases, and that it is a very frequent precursory symptom of fully established menstruation. He therefore drew the physiological conclusion, that for the performance of menstruation, the ovaries not only determine the menstrual secretion from the womb, but often call into simultaneous action most of the organs which, being subsidiary to nutrition, are animated by the same ganglionic nervous system, and particularly the intestines, with which they are placed in such close juxtaposition. He then proceeded to the rules which he considered to be those which ought to be adopted in the administration of purgatives:—

1. During the prodroma.
2. During the regular establishment; and
3. At the cessation of menstruation.

1st. *Use of purgatives during the prodroma.*—As Dr. Tilt had previously shown that diarrhoea scarcely ever precedes the appearance of this function, he concluded that nature does not dictate purgatives to be given at this period, while experience has proved the painful consequences often entailed by their being administered as emmenagogues.

2ndly. *Use of Purgatives during fully established menstruation.*—As in more than 50 per cent nature prefaced the menstrual crisis by a premonitory diarrhoea, so experience teaches that purgatives may be advantageously given, when defective menstruation does not depend on any serious organic or uterine lesion; but the great point, says Dr. Tilt, in the administration of purgatives is, so to give them that the menstrual type be not interfered with, for although this may be done with impunity in a very small class of women, it cannot be with the majority. Brisk purgatives, given a few days before those symptoms which generally precede each menstrual epoch, often anticipate it by several days, and thus vex nature in one of her most constant laws, and in many cases permanently disordered menstruation may be ascribed to the function having been treated as a child plays with a watch,—setting the hands backwards and forwards. An inquiry, therefore, into how many days before the menstrual premonitory diarrhoea used to appear, or if the patient has not that symptom, the date of appearance of other menstrual symptoms will be a sure guide as to the fit time for giving purgatives. Dr. Tilt next indicated the value of purgatives in amenorrhoea and chlorosis; and stated, that a doctor, cited by Morgagni, never gave anything else in these cases but small doses of aloes. Dr. Hamilton, of Edinburgh, also depended exclusively on purgatives for the cure of chlorosis; but Dr. Tilt is of opinion, that it is better not to confide in purgatives alone, but to let them form the initial part of the treatment, as in nature diarrhoea often forms the initial part of menstruation. His plan is to begin by making a decided shock on the system of nutrition by an emeto-cathartic, and then give steel and bitters; but, if the appetite does not improve, and the bowels remain sluggish, he puts aside the steel and bitters, and seeks to break in on a perverse concentration of forces by giving another emeto-cathartic. If this plan were followed, he adds, the treatment of chlorosis would not require so long a period as it frequently does. Speaking of that period women appositely term the *lodging time*, Dr. Tilt is of opinion, that purgatives given just before the menstrual epoch are injudicious, for they might increase the flow nature seeks to diminish; instead of these, the frequent use of the milder opening medicines should be prescribed, so as to diminish by degrees the plethora of the abdominal viscera. And, as amongst the vicarious diseases by which nature enables the system of woman to right itself, diarrhoea is the most frequent, so should purgatives be habitually given after the cessation of menstruation, not to re-establish a periodical flow, but to diminish plethora, and the necessity for that plethora seeking for any other less manageable vent. With regard to the particular purgative, Dr. Tilt frequently prescribes the soap and aloes pill of the Pharmacopœia, ordering 5 or 10 grains to be taken with the first mouthful at dinner; and states, that though he has often seen hemorrhoidal affections relieved by the use of aloes, he has never seen them caused by it,

and his experience is confirmed by that of Avicenna, Stahl, Giacomini, and Cullen. Flowers of sulphur alone, or else to each ʒj. of it, a drachm of sesquicarbonate or borate of soda, and sometimes from 5 to 10 grs. of ipecacuanha, he also administers, ordering from 1 to 2 scruples of the powder to be taken once a day in a little milk, so as to act mildly on the bowels, which is particularly required at the cessation of menstruation.

Mr. Druitt inquired of Dr. Tilt, whether he were acquainted with a modest little pamphlet by Dr. Butler Lane, on the connexion between uterine derangements and biliary disorders. He had ascertained the concomitance of the menstrual secretion and diarrhoea, and the results he had obtained differed but little from those of Dr. Tilt. Of 200 cases, in 20 or 30 per cent. there was no difference; of the remainder, nearly one half had diarrhoea, and rather more than half constipation. He wished to ask Dr. Tilt if he had seen this pamphlet, as he thought Dr. Butler Lane had anticipated many of his conclusions. He did not make this remark with any view to detract from the value of Dr. Tilt's enquiries.

Dr. Tilt replied, that he had never seen the work, but should assuredly give it a careful perusal.

Dr. Crisp observed, that there was no subject respecting which medical men were so likely to be deceived, as menstruation, as no woman will disclose more than she can help respecting it; and he therefore thought it possible Dr. Tilt had been deceived in some of his positions. The marrow of the paper was, that women generally have diarrhoea prior to menstruation. This he thought was not correct: it might so with nervous, delicate women, predisposed to diarrhoea, but was not so generally.

Dr. Ogier Ward had made some statistical enquiries for Dr. Butler Lane, which were completed too late for publication in his pamphlet; but the results led him to coincide in opinion with Dr. Lane and Dr. Tilt. He was very cautious in exhibiting aloes, because of their tendency to induce hæmorrhoids.

Mr. I. B. Brown considered, that, upon physiological and anatomical principles, Dr. Tilt's deductions were erroneous. If diarrhoea usually preceded menstruation, there would be more constitutional disturbance and less menstrual secretion. As a general rule, persons in rude health have constipated bowels prior to the appearance of the catamenia, but in leucophlegmatic patients, with a low state of the system, there may be a serous discharge from the bowels. If he understood Dr. Tilt right, he said that diarrhoea, previous to menstruation, occurs in 50 per cent. of the cases, and that in defective menstruation he would therefore give purgatives. He trusted the members would not go away with the impression that under such circumstances they should give purgatives to cause diarrhoea, because Dr. Tilt considered it a precursor of menstruation.

Dr. Henry Bennet had derived information from Dr. Tilt's paper. He was not aware previously that diarrhoea so often precedes menstruation, having hitherto regarded it as a pathological condition. He would wish to ask Dr. Tilt the nature of the cases in which he had made his enquiries—whether the women had any uterine disease. He had thought the prodromic diarrhoea symptomatic of uterine derangement—of inflammation of the cervix chiefly. He had formed this opinion from some remarkable cases, so that when that symptom occurred, he had always considered it to indicate inflammatory action of that part. It was, he supposed, a morbid symptom, indicative of a congested state of the pelvic viscera, and sometimes associated with irritation of the bladder.

Mr. Dendy thought that some confusion arose from blending the two parts of the paper, the first treating of diarrhoea as the precursor of the catamenia, and the second the giving of purgatives in cases of amenorrhoea. The former he objected to, for he thought that diarrhoea would diminish the amount of the catamenia. The latter he was in favour of. In concluding, he regretted that Dr. Tilt had shown a considerable obscurity in his style.

Dr. J. R. Bennett observed, that every practical man had met with disturbed bowels during menstruation, dependent on different causes in their relation to each other. The more difficult cases to treat, were those of prolonged serous discharges from the bowels, connected with complete amenorrhoea, in women of lax habits and anemic condition. Sometimes the cutaneous function is also disturbed, the skin is dry and parched, and the perspiration arrested. It is very difficult to stop the serous discharge, but, to do so, it is necessary to restore the functions of the skin, and to lessen the anemia.

Dr. King objected to the number of cases brought forward by Dr. Tilt. 200 cases were not sufficient for vital statistics; at least 10,000 were necessary. He thought if Dr. Tilt had pushed his enquiries further, he would have somewhat modified his views.

He himself was of opinion, that constipation generally preceded and followed menstruation, and that diarrhoea was present while the catamenia were flowing, and he agreed with Dr. H. Bennett, that diarrhoea, as a prodroma, was a morbid symptom. It is the general impression that aloes induce hemorrhoids, and so they will if an impure article be used, in the simple form, but if the Socotrine aloes be given with hyoseyamus, such will not be the result.

Dr. Murphy had never thought of enquiring as to the occurrence of diarrhoea prior to menstruation, in healthy persons, but he believed, if he had done so, that many important points might have been elicited. He could understand, from the physiological condition of the parts, that diarrhoea may precede the catamenia, even in a healthy woman, for a large volume of blood is suddenly thrown on these parts, and the rectum relieves itself by a painless, serous diarrhoea, which ceases when menstruation is established. He, therefore, differed in opinion with Dr. King, and thought that constipation existed while the catamenia were flowing. In a pathological point of view, the statement is important, as showing that diarrhoea is a morbid symptom indicative of a diseased condition of the uterus—a symptom of sympathy. This, with the obstinate serous discharge in other uterine cases, shows the great connexion and sympathy between the uterus and the bowels. With regard to the exhibition of purgatives during menstruation, if they be properly used, they will be of service, and are not dangerous, but they should be given with great caution. Active purgatives should be avoided; they should be such as will improve the secretions, and purge gently.

Mr. Hunt quoted a statement made by Dr. Tunstall, of Bath, when resident medical officer of the Bath Hospital, that all the women in it, who had diarrhoea during the prevalence of the cholera, were attacked while menstruating. None of them died in consequence; the cases were all mild. He thought Dr. Tilt hasty in concluding from his facts that 50 per cent. of women had diarrhoea prior to menstruation, and said that, had the fact been so, we should have heard of it before the year 1851.

Dr. J. R. Bennett said, to mark the connexion between the diarrhoea and the menstruation, we should know whether the catamenial period had been hastened or not.

Mr. Hunt did not think it had been.

Mr. Druiitt remarked that there seemed to be a discrepancy as to aloes causing piles, and he thought that he held the key to it. When given only in small doses to unload the colon, it acts well, but if given as a purgative, to act like calomel or a saline purgative, its effects tell on the sigmoid flexure and on the rectum, and induce hemorrhoids. He did not understand Dr. Tilt altogether as to the circumstances in which he would give purgatives during and after menstruation, and would be glad to hear more about it—the purpose and use of the purgatives.

Dr. J. R. Bennett thought the key as to the non-induction of hemorrhoids by aloes was not yet found; at all events it had not been presented to them. Dr. King's plan had failed in his hands. Mr. Druiitt's was more important and more likely to be successful, but not always. Even in small doses aloes will produce hemorrhoids in those predisposed to them. His own plan was to give it in a minute form with a small quantity of iron, or nux vomica, or of another purgative.

Dr. Tilt in reply, said that he brought forward the results he had already obtained with the full knowledge of their imperfect form, in the hope of testing their value by the experience of others. He had learned with pleasure, that Dr. Butler Lane had deemed the subject worthy of investigation, and he owned to have derived information from the present discussion. Dr. Tilt regretted that he had not met several objections, by stating in his paper the manner in which he had conducted his enquiry. His statements did not refer to *diseased*, but truthfully represented the phenomena of healthy menstruation, and could stand the physiological deductions he had drawn from them, for he had long been in the habit of enquiring of all the female patients who sought his advice, what was the habitual state of the menstrual function during their period of health. Chlorotic patients, whom he invariably found subject to constipation, or those labouring under serious uterine disease, in whom as Dr. Bennett had stated diarrhoea existed, often assuming a morbid intensity proportioned to the disease, were carefully excluded from his 161 cases. Such pathological facts, as well as the judicious observations made by Dr. Murphy and Mr. Hunt, confirmed Dr. Tilt in his views. He regretted, however, the impossibility of reconciling the discrepancies of those who had spoken on the properties of aloes, being himself in the constant habit of prescribing the aloes and soap pill at dinner-time as an ecceprotie. He had never seen it produce any hemorrhoidal affection, and he maintained that those whose experience

was at variance with his own, must have given it in a different manner, in larger quantities, and to patients predisposed to such affections. Dr. Tilt knew, from experience, that he had brought forward many practical and valuable suggestions relative to the use of purgatives—suggestions which had been overlooked, or at least not discussed; and, at that late hour in the evening, he regretted that he could not comply with Mr. Druiitt's request, to enter more fully into the rules he had already laid down for their administration.

March 1st, 1851.

Dr. BENNETT, President, in the chair.

The early part of the evening was occupied with the election of the officers for the ensuing year. Dr. Lankester, Dr. Smiles, and Mr. Harvey, were appointed scrutators; but their report will not be made till the next meeting. The papers read on this occasion will be reported in our next.

CORRESPONDENCE.

THE BILL OF THE NATIONAL INSTITUTE, AND THE LONDON AND EDINBURGH COLLEGES.

To the Editor of 'The Institute.'

SIR,—The resolutions unanimously passed by the Royal College of Surgeons of Edinburgh, some weeks ago, giving their *conditional* support to the bill brought into Parliament by Mr. Wyld, appear to have been received by some parties in London with strong disapprobation, and also with a certain amount of misapprehension of their nature and tendency, as well as of some of the past facts of the late struggle for a general measure of medical reform. This induces me to address to you a few explanations relating to matters of principle, and corrections relating to matters of fact. Though I believe myself to speak the sense of the Royal College, of which I am a Fellow, yet I beg of you to understand, that no one but the writer is responsible for what follows.

The question of medical reform in Great Britain and Ireland, is brought to a pause, because our friends in London have got a couple of Royal Colleges, which will not do their duty to the profession at large. The very height of all possible or imaginable duties which such colleges are called to perform, that duty which chiefly justifies by its performance, or condemns by its non-performance their corporate existence, is the duty of contributing, as much as in them lies, to the elevation of the character, *status*, and education of the great mass of the profession. They have had it represented to them in the very strongest language, and by none more strongly than by their brethren of the two Edinburgh Colleges, that the General Practitioners of the United Kingdom labour under certain disqualifications which can only be removed by a General Bill of Medical Reform, calculated to introduce uniformity of education, of examination, and of qualification; so that a well educated medical man should not be under the necessity of qualifying three times over if he should commence general practice in all the three divisions of the kingdom successively. With the exception of the two London Colleges, all parties possessing at present, the power of conferring medical and surgical qualifications, have done their best to bring about the desired change. But the English Colleges have strangled a measure supposed to have been ripe for legislation; the one college (as is generally thought here) by its indifference, the other by its fastidious objections, urged at the eleventh hour. Since this happened, a whole session of parliament has passed over, and a second is now in progress; and yet these Colleges, which undoubtedly possess the power of removing the difficulties existing in England, and nowhere but in England, are still supine or hostile; certainly unprepared with any honest remedy for a great and undeniable and universally admitted evil.

The General Practitioners of this, and of every other country, are, out of all comparison, the most important class of medical men, to the public. I italicise the assertion, to make it more emphatic. If a patient is seized with fever, pneumonia,

erysipelas, hernia, or flooding after labour, or has met with a severe accident, or swallowed oxalic acid, or arsenic, or some other poison, the fate of the individual for life or death, for health or the reverse of health during the residue of life, depends, not on the existence of such eminent persons as Bright and Latham, Brodie and Travers, Rigby and Locock, in the metropolis, but on the existence in the nearest village, of a medical man well acquainted with his profession; or, in other words, of one of the class of General Practitioners. Give to the British public a class of men thoroughly well educated, examined, and qualified in all the departments of the healing art, and you may safely leave it to the industry, energy, emulation, and ambition of such a class to supply us with worthy successors of the distinguished persons whom I have named. Such men cannot be made as bees make queens, by a superior species of feeding, and, at the same time, degrading others into mere working-bees. It will not do any longer for medical men, living at the great centres of medical information, to continue to give encouragement to the settlement in practice of imperfectly educated men, by discouraging those who have laboured to acquire the best education which the great schools of this country afford. Supineness on the part of privileged bodies is highly culpable, and such conduct as that of the London College of Surgeons might justify a stronger term. A letter from a London gentleman, which I lately saw, describes the General Practitioner's Bill as the work of a "knot of busy London apothecaries." Be it so. They are the members of at least one, and probably of two privileged incorporations, and they are honourably "busy" in the endeavour to find a remedy for a great evil. If other parties in your city disapprove of their doings, their proper method of procedure will be to make themselves "busy" too in the honest endeavour to accomplish the same object in an unobjectionable manner. The Royal College of Surgeons of Edinburgh has no bigotry in favour of one plan more than another, but will be found steadily opposed to all attempts to frown into insignificance the most important class of practitioners in this great country, and equally resolved to lend their countenance to all endeavours, which are made in a spirit of sincerity, to elevate their condition and to remove their grievances. If the gentlemen of the English Colleges think the support of the medical gentlemen of Scotland of any value, there is one way, and one way only, to acquire it, and that is by a zealous and well directed effort to remove the difficulties in England which are opposed to the settlement of Medical Reform. After what occurred in 1849, the *onus* certainly lay with them of having been prepared, long before the commencement of the present Session of Parliament, with a good practical plan as a substitute for that which was then shipwrecked.

In Scotland, I trust we shall persist in our endeavours to place provincials and metropolitans on exactly the same level, and to employ all the influence of both, and especially of the latter, to render the General Practitioners of the country more and more worthy of that high position to which their excellent education and their great usefulness so justly entitle them. We shall also endeavour, as I am fully convinced, to ally ourselves with all parties who seem to us able and willing to procure for medical gentlemen, possessing Scotch qualifications, that rank in England and Ireland which we think that no others are, as a class, better fitted to occupy with dignity and with usefulness.

I had intended to stop here; but some passages in which your contemporary, the *Medical Gazette* (of 21st February), discusses the conduct of the Royal College of Surgeons of Edinburgh, seem to me to call for correction, as they are directly calculated, I hope not designed, to convey very false impressions as to matters of fact. I quote, I., from page 331. The small capitals are mine.

"Nor is it to be expected that a new College will be incorporated if the necessary result of such an incorporation be that of OVERTHROWING THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS."

II. Page 332. "In the first paragraph of this resolution, the (Edinburgh) College (of Surgeons) regret the failure of a general measure of Medical Reform proposed by a Conference, representing all the great interests of the United Kingdom. Now, this 'general measure' comprised *inter alia* the foundation of a new College of General Practitioners, by BY WHICH ALONE, the examinations for practice were thenceforth to be conducted."

III. Page 332 (mentioning the failure of the Bill of 1849)—"The failure of a measure which PRACTICALLY ABOLISHED THE TWO ROYAL COLLEGES."

IV. Page 333 (of the privilege of examining in surgery).—"So long as the delegates of the Institute did not specify their intentions on this point, matters went on smoothly. The claim to examine in surgery, on the part of the proposed new College, was not made at the Conference, but in the Committee of the Commons, and in-

dignantly repudiated the next day by Mr. Travers, the President. The College had not consented to DIVEST THEMSELVES OF THIS PRIVILEGE, &c."

Now I have to trouble you with the following corrections of these erroneous statements:—

First, as to the supposed tendency of the *present* General Practitioners' Bill, to "overthrow the Colleges." It must not be kept out of view, as the writer does—1st, That the Colleges have on all occasions declined taking charge of the examinations of Practitioners, with a view to conferring qualifications in *all* of the branches of their profession; and 2nd, That they have systematically refused all situations of honour, in their Corporations, to all persons who practise as General Practitioners, and who are not pure physicians, or pure surgeons. They must not play the dog in the manger, refuse both to confer honours which are due, and to suffer others to confer them, and then complain of the risk of being overthrown, by a measure which their own conduct has made necessary.

Secondly, passing from the consideration of the *new* College now talked of, to that of the very different one spoken of in 1849, you will judge how incorrect the assertions above quoted as to the latter (see above II., III., IV.) are, from the following facts:—1st, No attempt was made in the Conferences of 1849, either by the Institute or any other party, to deprive the London College of Surgeons of its privilege of examining in surgery. 2nd, the proposal then made was that the new College should examine in Medicine, Pharmacy, Chemistry, Midwifery, and the sciences collateral to these, and only *incidentally* on Surgery, and that each candidate should thereafter be examined by the College of Surgeons in anatomy and surgery, and should become a member of that College, before he should be admissible to the privileges of the new College. The new College were not to examine *specialty* on surgery, or to have any power in themselves of conferring a qualification in that department. What then becomes of the assertions that, by the new College "*alone*," the examinations "were thenceforth to be conducted;" that the measure then proposed would have "practically abolished the two Royal Colleges;" and that the College of Surgeons were ever requested, or expected, by any party connected with the Conference of 1849, "to divest themselves of this privilege"—the privilege, to wit, of examining in surgery. The privileges of the College of Surgeons were strictly respected throughout the whole of the proceedings of that season; both Colleges were represented in the Conferences, and nothing was demanded on the part of the new College by its promoters, at any time or in any place, but the modified power of satisfying themselves of the fitness of the candidate in a department which he was desirous to be permitted to practise, a power which no party who really desired the usefulness of the proposed College, and their respectability, ought for a moment to have thought of withholding from them.

The argument, therefore, of my letter remains unshaken by the remarks of the Journalist, who is evidently uninformed of the true state of the facts. The Edinburgh College of Surgeons would, undoubtedly have been better pleased to have seen the whole business of conferring qualifications for general practice, in England, in the hands of the existing Colleges there, and the rights, *status*, and interests of the General Practitioners duly provided for and respected. Such a plan would have been more in accordance with the plans with which we are familiar, in this part of the island. It is true, that our College of Physicians exercises no power of examining, except in the case of foreign graduates. But it is also true, that there is an amicable understanding between the Colleges, for the admission of the physicians to this privilege, along with the surgeons; and that it is no fault of ours, that this has not been carried into effect. In the meantime it is strictly true, notwithstanding some criticisms of your contemporary, which seem to impeach the statement, that "the qualifications of the General Practitioners of the country (Scotland) have been conferred by the existing great medical incorporations there," (see the resolutions of the College of Surgeons of Edinburgh, 2nd February last), viz., by the Royal College of Surgeons of Edinburgh, and by the Faculty of Physicians and Surgeons of Glasgow, both of which confer diplomas after examining *in all the departments of practice*; which diplomas are received as qualifications for practice in every part of the country. I may add, that although the chartered rights of our College of Physicians relate exclusively to this city, the *status* of its Fellows is held in the highest respect in every part of Scotland.

G.

Edinburgh, March 3, 1851.

[We shall have occasion to make some comments upon this Letter in a future Number.—EDITOR.]

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday,	March	8,	at 8 P.M.
MEDICAL CHIRURGICAL,	Tuesday,	do.	11,	at 8½ P.M.
ROYAL SOCIETY,	Thursday,	do.	13,	at 8½ P.M.
ROYAL INSTITUTION,	Friday,	do.	14,	at 8½ P.M.
STATISTICAL SOCIETY,	Saturday,	do.	15.	
[The Anniversary.]				
MEDICAL,	Saturday,	do.	15,	at 8 P.M.

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THE INSTITUTE.

LONDON, SATURDAY, MARCH 8, 1851.

NOTWITHSTANDING the vexatious delay to which the Bill of the Institute must necessarily be subjected before its introduction into Parliament, owing to the difficulties which have lately beset the Government, it is highly gratifying to us to find that the necessity for an efficient and comprehensive measure of Medical Reform is becoming daily more and more obvious, and that the Bill of the National Institute is finding many new supporters.

A short time ago, we made especial reference to the Resolutions passed by the Royal College of Surgeons of Edinburgh, expressive of their hearty assent to the Bill, and their determination to support it, and we expressed a hope that we might speedily be enabled to announce to the profession the cordial support of other Corporations. In this we have not been disappointed. The College of Physicians of Edinburgh, we learn, have also expressed their determination to support the measure, and to aid the Council of the National Institute in their earnest endeavours to overcome the difficulties which beset the Reform question, and which we are satisfied the Bill of the Institute can alone effectually accomplish. It is the only measure that has ever yet been introduced to the notice of the profession or the Government, which has grasped the main difficulty or provided for the interests of the profession at large. The Bill would, in fact, be a benefit to all and an injury to none. How far it may affect a few obstinate individuals, who have abused the power with which they were entrusted, is a question we do not at this moment enter upon, further than to express our conviction that should it eventually lead to the overthrow of the Institution they profess to represent, it will be only a just retribution for the evils they have inflicted upon others, and the arrogance with which they have treated the vast majority of its members. We

earnestly call upon all the General Practitioners to bestir themselves and agitate with the same fervour and zeal which first brought the National Association into existence. Remember how much you *have* accomplished. The future well being of your children, who one day, in all probability, will be treading in your footsteps, demands your serious consideration. Do your part at least to shield them from the evils which surround the profession in your day, and never weary until you have scared away the impudent charlatan, the plunderer of your children's bread. Remember that you yourselves would not be what you are but for the labours of those who preceded you; but for the energy and zeal of your forefathers, you might yet be "shaving, bleeding, and tooth-drawing." The Act which emancipated you from this position, and raised the tone and standard of the Practitioner, has long ago accomplished its purpose. The unity of Medicine and Surgery as one science, however much it may have been faintly discerned in times past, has been left to the present generation, by the aid of the microscope and analytical chemistry, clearly to elucidate; and this increased knowledge demands of the whole profession a progressive movement. No progress, however, can possibly be made until the General Practitioner question is adjusted; and when this is done, we predict the rest will follow.

THE HUNTERIAN MUSEUM.

"A copy of a resolution passed by the trustees of the Hunterian Museum, in February, 1846, relative to the means of enlarging the space for receiving and exhibiting the collections, has been laid before the House. The resolution moves that the Marquis of Northampton and the Bishop of London be requested to submit to the First Lord of the Treasury the claims of the Hunterian Museum to some provision whereby it might obtain an enlarged area for its contents, and be enabled to maintain itself worthily 'as the great national depository of the branches of knowledge which it has been instituted to promote.'"

We copy this paragraph from the *Times* of the 28th ult. A few words from us will not be altogether unprofitable at the present time, upon the subject of the Hunterian Museum. When the Parliament of this great country undertook to purchase the late Mr. Hunter's Museum, they did it upon national grounds, and the public do well to remember it was purchased with their money. Now the College of Surgeons, to which this collection was committed, have from time to time made application to the Treasury privately, and, as it were, unknown to the public, for funds to enable them to enlarge their Museum, and thereby to strengthen their position and magnify their office. Against the danger of adopting such a course we shall ever protest, as likely, nay, certain to lead to the very worst and most arbitrary conduct. The generosity of the British public was determined to place in a position of eminence the labours of one who was not only an honour to the profession to which he belonged, but an ornament to that nation, a paragon of genius and perseverance that was, perhaps, unparalleled in the world. In doing this, they had not, in the liberality of their hearts, the remotest idea that this vast collection was to become the stepping-stone to a few crafty and avaricious men, whose object was, to wrap it up in magnificent secrecy, closing it entirely from the eyes of the public, and almost entirely from the eyes of the profession. What was the consequence of presenting this wonderful proof of individual labour and intellect to a private Corporation? No one was allowed to see it, but

those who had feed a clique of self-elected Counsellors, and became nominal members of the said College. Why, the very thought that this state of things has been kept up with very trifling relaxations to the present day, is so preposterous, that we can hardly believe we are writing it. But the Treasury will do well to pause before they consent by any act of theirs to keep up so injurious a monopoly,—a monopoly that is neither creditable to themselves, nor pleasing to the great body of the profession, nor honourable to the public, from whom originally the money was obtained. It may with the greatest justice be asked, why is the College of Surgeons, as an exclusive branch of a large widely-comprehending profession, to be allowed to hold this Museum as if it were private property, while there are hundreds of specimens in it that have as much to do with surgery as they have to do with the Bishop of London, or the Marquis, whose political interest they had secured, we presume, when discussing these delicate points before the Royal Society? Away with such unworthy conduct! But the eyes of the public, and also of the profession, are opening, and we shall wait the issue.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLXIV.—REMARKS ON THE TREATMENT OF ACUTE HYDROCEPHALUS. BY HENRY KENNEDY, A.B., M.B., M.R.I.A., Fellow and Censor of the College of Physicians in Ireland.—Much as has been written on hydrocephalus, much still remains to be cleared up on the subject. With what a number of difficulties is it not yet surrounded? Who has not seen instances where the difficulty arriving at a correct diagnosis has been great, or not heard of other cases where the medical attendant has been surprised by the sudden invasion of acute head symptoms, over which his art had little or no control? Or, again, who knows not how frequently other, and apparently very dissimilar, and it may be trivial affections, terminate in this intractable and most fatal one? Some such thoughts as these have induced me to bring under notice this subject once again. It should be premised, however, that I am not now about to enter into the subject at large, but merely, after detailing a few cases, to make some remarks, which the cases themselves, as well as the additional experience of the last six years, have forced on my attention. For the cases themselves I am chiefly indebted to my attendance at the Cork-street Hospital, and to the kindness of my friend, Dr. George Kennedy. The number of cases of the disease that are to be seen there, one year with another, has often surprised me; and there, as elsewhere, it occurs, that when one case is admitted, others are sure to follow. With these few remarks, then, I shall at once proceed to narrate the cases alluded to.

Case 1.—In May, 1845, I assisted my friend, Dr. Fawcett, of Clontarf, to make a *post-mortem* examination of a boy aged four years. He was a perfect model in shape, and seemed to have been in very good condition. Though I am unable to state the exact time, it appeared that, some few days previously to his last and fatal illness, he had a severe fall on his way home from school. This was followed by a state of dulness and listlessness, which lasted for two or three days, when he began to complain of his head; this was shortly followed by vomiting of an unusually severe character, attended with symptoms of very high inflammatory fever. He was then seized with convulsions affecting one side more than the other. The treatment was most prompt and decided, consisting of general and local bleeding, with calomel and blisters, and for a time with apparent amendment; but the violent symptoms recurred, and the boy sank on the fourth day of the acute attack. The head only was examined, and there we found, particularly on the anterior lobes, a considerable quantity of healthy pus effused, smeared, as it were, over the brain's surface, but still on the arachnoid. On making a section of the organ a large number of bloody dots appeared. There was some effusion into the lateral ventricles. The base of the brain was healthy.

Case 2.—A girl, aged six years, was admitted into Cork-street Hospital in October, 1849; she was a thin, delicate-looking girl, and one of three other cases admitted about the same time, all

labouring under hydrocephalus. It is unnecessary to enter into any details, further than to say that, in the progress of her illness, she presented the following symptoms:—slight, but well-marked signs of fever; great and constant complaint of her head,—the cry so peculiar to the disease going on night and day for many days, and disturbing the patients in the ward; and then, as the disease advanced, convulsions of one side of the body, while the opposite side was rigid; dilatation of the pupils, one more than the other, with injection of one of the eyes; loss of flesh, and tendency to bed-sores. After these symptoms were present, more or less, for twelve days, the girl began to show signs of amendment. The eyes gradually got more appearance of life about them; the tongue would occasionally be put out; the fits of screaming ceased, at first in the day time, and finally at night; and the rigidity of the body, together with the drawing back of the head,—which, I should have stated before, existed all through in a very marked degree,—finally disappeared; and the little patient, given up as lost some days before, made a good though a slow recovery.

Case 3.—In the month of October, 1850, Wynne, a very delicate boy sixteen years of age, was admitted into Cork-street Hospital, labouring under fever. He was reported to be a fortnight ill. He had a hot skin and heavy eyes, with a contracted state of the brows; his tongue was furred, with a brown stripe down the centre, while his pulse beat but 60 in the minute, and was equal. He had some tendency to bowel complaint, and the nurse stated that he had vomited several times since his admission. On questioning him his only complaint was of his head, and he referred the pain to his forehead, just over the eyes. He remained very much as described for many days, during which all his complaint was of his head, while his pulse never exceeded 60, and on two occasions was as low as 54. During this period too he vomited several times, and frequently without any assignable cause. Finally the pulse rose to about 70, and with this change the other symptoms subsided, but so slowly that a month elapsed before the boy left his bed, and when up his appearance was far from that of health; nor could he be said to have fully recovered even on leaving the hospital some time later.

Case 4.—At the very time that Wynne was in hospital, another boy, aged 16, was admitted, labouring under symptoms precisely similar. He was of small stature, but his head was large. When four years old, he had awakened out of sleep affected with paralysis of the left leg and arm; and from that to the period of his admission into hospital he had never recovered the use of either. They were now both atrophied and contracted. On his admission his countenance was heavy, and expressive of suffering; he had fever, but not to any extensive degree; a very furred tongue being the most striking feature of it. He had repeated vomiting both before and after his admission; the pulse at this time being, as in the last case, only 66, at which it remained for five days, and then rose. This boy's only complaint was of his head, and for some days the pain was of a very intense kind. By treatment, of which more will be said again, the symptoms gradually, though very slowly, subsided, and he was finally dismissed well.

In addition to those given, I have seen one other case, occurring in a girl of 17, where symptoms of fever ushered in head symptoms of a very marked character, and in which all the usual signs of hydrocephalus, including vomiting, dilated pupils, strabismus, slow pulse, and fever, were present. I have no particular notes of the case, but the patient recovered, though her recovery was unusually protracted.

The foregoing cases have been given with a particular object in view. The last four include all those of recovery which I have seen, in a period now of several years; truly, and on looking back, the remembrance is anything but pleasing; for there is exhibited a rate of mortality which, amongst what are called acute diseases, is only surpassed by hydrophobia itself. With such a fact in view, it is not, surely, too soon for us to call in question, or at least reconsider a disease and its treatment, where the mortality stands so excessively high. It is with this intention that these remarks are now put forward, and here, as in every other instance, I would wish them to be considered as suggestions merely.

I would begin this part of the subject by observing that the words "acute hydrocephalus" appear to me to have been unhappily chosen; for they at once convey the idea, as regards treatment, of bleedings, whether general or local, together with other parts of the antiphlogistic plan; and that they lead to this line of treatment, there can be no doubt. All the standard works on the subject bear me out in this statement. Now, is the form of hydrocephalus which we most commonly

meet, an acute disease? I must reply to this question in the negative. It is quite true that we shall meet the disease presenting very acute symptoms, and running a very rapid course. But I must assert that such are the exceptions to the general rule; and that in by far the majority of instances the disease is more of a subacute than of an acute character. The child's health is observed to be failing before the attack; he looks ill, and has possibly been losing flesh; and when the head symptoms do show themselves, though there commonly is considerable reaction, still, all who have observed the disease, must recollect that this will have, in great part, subsided for days before the fatal termination; nor indeed is it at all uncommon to see patients die with cold and livid extremities, failing pulse, &c. But again, does this form of the disease—which, it must be repeated, is the most common form—terminate in the same time as an attack of acute disease, such as pneumonia? Every one must answer in the negative. In my own experience the average duration of the disease has been three weeks; sometimes a day or two under this, but as frequently a day or two over. There still remains one other reason, and to my mind it appears a very strong one, why we ought not to consider the more common form of hydrocephalus an acute disease. It has happened to me on several occasions to meet, amongst the poor, cases in which literally nothing had been done for days after the commencement of the complaint. Under such circumstances it might be expected that the disease would have run a more rapid course, but such was not the result; for though the children did ultimately die, they certainly held out as long as cases in which treatment had been enforced from the commencement of the attack.

But further. If we come to the nature of this intractable disease, the views put forward are still more fully borne out. For what is its essence; why is it that it should not yield, like other acute diseases, if it be of the same nature? Simply because it is not an acute disease, as the terms are usually understood. It is not like pneumonia or peritonitis; on the contrary, I agree with those who look upon it as a constitutional affection, and allied, in the great majority of instances, to the strumous diathesis. It has been my lot to have examined after death a very considerable number of cases of hydrocephalus, and in every instance where the examination extended to all the cavities, I have invariably found tubercles in one or other organ of the body, sometimes in several organs at the same time. The liver, spleen, kidneys, mesenteric glands, lungs, and even the heart itself have been so contaminated; and in some instances I have found tubercles in the substance of the brain. Nor are these facts at all novel. Some forty years ago, Cheyne stated that it was common to find tubercles in the liver in these cases, and the fact has been confirmed by many other observers since. But I think it may be questioned whether the deductions which fairly arise from them are kept as prominently in view as they deserve.

If the foregoing remarks, then, be correct, it will be now understood why I am inclined to suggest that the term "acute hydrocephalus" should be changed; or, at least, if retained, that it should be understood as not indicating acute disease, as it is commonly spoken of, but rather a sub-acute affection. Probably some may think that the mere change of terms would be a matter of little moment; I confess, however, I do not think so, but that it would be of importance if some term were used which would indicate that we have not acute disease to deal with. Passing by, however, the mere change of name, other and more serious questions follow from the views which have been advanced; I mean as to treatment, and this is really the important part of the subject; and as regards it, I venture to propose the following question: Is the treatment of the more ordinary form of hydrocephalus too heroic? I believe it to be so, and that a better prospect of cure will be held out by a treatment a good deal modified from that in common use. The limits, however, of this paper prevent me from entering into the subject at any length, and I shall, therefore, confine myself to a few remarks on two of the remedies in most general use, I mean bleeding and mercury. Of the former,—and I am now only speaking of local bleeding,—I have fully satisfied myself that, speaking, of course, of the great majority of instances, very little of it will answer every purpose. This point I have been confirmed in by what has been already stated—viz., that cases left to themselves for days did not appear to run a shorter course than those where treatment had been adopted from the outset. What I would suggest, then, would be the use of as much local bleeding, and no more, as would suffice to relieve pain; for as to cutting short the progress of the disease, I look upon it as vain. Let me not be misunderstood, however. There are cases of the disease of a really acute kind, and these must be met, not only by free local, but even by general bleeding. It was to illustrate this that the first case

I have detailed was given; and this too is an additional reason for drawing a distinction between what is *really* acute, and what has hitherto *been called* acute disease. But then it must be borne in mind that the former is the exception to the general rule, and that for one such, there are at least ten of the latter, possibly more. Of the acute form of the disease, I have seen different instances where the result was favourable; one, some short time back, I saw casually with my friends, Drs. Irvine and Denham.

To mercury similar remarks, I think, apply. It would seem, as far as I have seen, to be used as a *sine qua non*; and yet the results do not appear to justify such a faith in it. If the attack be of the really acute disease already spoken of, probably no better medicine than calomel can be employed. But in the more frequent form of the affection, I have had the conclusion forced on my mind that other means held out a better prospect of success; and the same conclusion had been arrived at before myself, by the physician to whom I have alluded in an earlier part of these remarks, Dr. George Kennedy.

I may mention, as bearing out these views, that I have notes of more than twenty cases of hydrocephalus, in which the specific effects of mercury were produced, and yet in not one of these cases was the result favourable, to say nothing of others where salivation could not be induced. And, indeed, if we consider for a moment the specific nature of the disease, it will not appear strange that such an amount of fatality should attend it. It is, I believe, an established rule that mercury does not act favourably in strumous constitutions. Hence we can offer some explanation, at least, why such unfavourable results should occur in the cases alluded to. Is it, I would ask, in weak, strumous children, with a strong predisposition to form tubercles, is it right to give mercury, and do our utmost to induce its specific effects? The answer to this must be in the negative. But then it will be asked, what other resource is there—what means would you use? And this leads me, in conclusion, to make a few remarks on the treatment which I believe holds out the best prospect of success.

At the commencement of this paper four cases were given, in which recovery took place after the disease had passed into the second stage, that is, when the pulse had fallen. Now it is specially worthy of notice that three out of the four were not salivated; and in the fourth salivation was produced more by accident than design; in fact he had got a small quantity of hydrargyrum cum creta, when his mouth became suddenly and severely sore. They were all leached, and the grey powder, in very minute doses, as an alternative, was administered with antimonial powder. Blistering was very freely used, at first in the ordinary mode, and subsequently, in two of the cases, under the form of the tartar emetic plaster applied to the head; and in this way a constant discharge was kept up. But, in addition to these measures, particular attention was paid to keep up the strength: some got beef tea and others wine, and this while the disease was still present. The child of six years old got two ounces of wine, which was increased to three in the day; and this was given while the pupils were still dilated, while the screaming was constant and the convulsions existed; and it was apparently under its use that this child rallied. Other measures, which are, however, in every-day use, were also enforced, but need not be spoken of here. The recovery of all was unusually protracted and slow, as indeed we might expect in such cases.

From this brief sketch it will readily be inferred what the line of treatment is which I would venture to suggest in this intractable disease, and I can only venture to suggest it, inasmuch as the experience I have had has been too limited to enable me to speak with confidence of it. But what then? Is it not better to act on a hint of this sort, few though the recoveries have been, than continue in the beaten path, which we know, as a matter of fact, leads to such a fearful mortality. I cannot think there is anything irrational in the general views of the disease which have been now stated, while the mortality alluded to will justify any modification of treatment which will hold out a reasonable prospect of success. To sum up, then, I would say that the ordinary form of hydrocephalus is a sub-acute disease, that bleeding and mercury ought to be very moderately used in this form of it, while wine or other stimulants ought to be given as early as prudence would justify.—*Dublin Quarterly*, February, 1851.

CLXV.—POISONING BY CORROSIVE SUBLIMATE. By H. W. WILLIAMS, M.D. (Read before the Boston (U.S.) Society for Medical Observation, Aug. 19, 1850.) The following report of a recent case of death, after the ingestion of a solution of corrosive sublimate, is interesting from the insignificance of the pathological alterations exhibited upon *post mortem* examination.

I was called about noon on Monday, 12th August, to see L. B. R., aged 42, mason; and was informed that he had purposely swallowed a solution of corrosive sublimate. On my way to the house, I learned that he had taken about an ounce of a solution, containing thirty grains to the ounce, and that about half an hour had elapsed since it was swallowed. Was told that he vomited in ten minutes after the poison was taken, and that an emetic was soon after administered by the apothecary who sold the solution, as also one egg. Another egg had been given him by his wife before I saw him. He had vomited several times, in all about six ounces. The matters vomited appeared to consist of mucus and the egg swallowed, with some dark masses resembling sputa, except in having a dull lead tinge.

I administered the whites of three more eggs, and whilst others were being procured, gave some flour and water. Three more eggs were brought and given, vomiting having taken place since the previous remedies had been swallowed. Within half an hour he vomited several times, and I repeatedly gave quantities of flour and water.

I learned from his wife that his habits were intemperate, that he had eaten little for two or three days, and nothing on that morning.

He stated that he took the solution after stirring it in a tumbler with a little sugar.

I found him rolling uneasily about the bed, complaining of severe headache, and great pain in the stomach. When asked to point out the seat of the pain, he passed his hand over the whole of the upper portion of the abdomen. When asked if he had pain in his throat, he replied, a little but not much. The fauces were considerably injected. No tenderness on pressure in any part of abdomen. Conjunctiva injected; pupils natural, and sensitive to light. Face rather collapsed, and covered with cold perspiration. Tongue nearly natural in aspect, but cool. Hands and feet rather livid, shrunken, and cold. Pulse very rapid and small. Respiration natural. He had had several dejections, consisting of a dark fluid, with some small lumps of dark green fæces, previous to my seeing him.

Vomiting continued till about 1 P.M., the matters ejected consisting principally of the substances swallowed. Twice, portions of blood were mixed with the matters thrown off.

I directed flaxseed tea to be prepared, and gave it freely. It was eagerly taken, the patient complaining of intense thirst. His aspect is precisely that of a patient attacked by cholera, but who has not yet reached the stage of perfect collapse. Pulse could not be felt at wrist; at the carotids and heart it was 168, feeble, regular. He rolled so incessantly from side to side that it was difficult to distinguish pulsation, even at heart. He complained of a burning sensation in abdomen.

Dejections were frequent, and towards two o'clock several followed each other at intervals of only two or three minutes. They continued to exhibit similar appearances, being almost entirely dark fluid; but several of the last had a quantity of flakes, apparently of mucus, mingled with them. He got out of bed without difficulty, but said he felt easier when lying down, as he was dizzy whenever he lifted his head from the pillow. Complained of cramp in left leg.

I ordered bottles of hot water to be placed at his feet, and directed that his limbs should be warmly covered. Directed that two more eggs should be given, and followed, after an interval, by draughts of flaxseed tea.

Again saw him at 3 P.M. Pulse had returned at wrist; 140, feeble, regular as to frequency, but varying in strength. Face rather less collapsed. Feels less pain. He has vomited the flaxseed tea, and had several small bloody fluid dejections containing small masses of coagulated albumen. They were free from faecal odour, but had the fleshy smell, sometimes observed in similar dejections in cases of cholera. He still rolls uneasily about the bed. Conjunctiva less injected. Tongue natural in aspect, but cold. Extremities still livid and clammy, but less so than when I last saw him. Face free from perspiration. Great thirst. No tenderness of abdomen. Ordered small quantities of rice-water to be given to relieve thirst. Pulv. opii gr. $\frac{1}{2}$ every hour till pain is relieved.

6 P.M. Pulse more feeble than at three o'clock. Has no pain. Dejections, of the same dysenteric character, have continued frequent. He has persisted in drinking large quantities of water, and has therefore vomited copiously. General aspect unchanged. Ordered more attention to limit the amount of drink, and pulv. opii gr. $\frac{1}{2}$ every half-hour till he becomes quiet.

9 P.M. Pulse fuller, 118. Fingers still corrugated and cold; tongue cool, natural in colour; face dry; conjunctiva natural. Pupils rather contracted. He has appeared inclined to doze after taking the opium, but has not slept. Great fœtor of breath. His

wife says she has previously noticed this, but never in so great a degree. He has no pain, but is very restless, and has the aspect of a patient suffering an attack of delirium tremens. He formerly had an attack, induced by his having fractured a limb. No tenderness of abdomen, but it feels extremely hard on pressure, though it is not at all distended. Passes very little urine. Drinks have still been placed within his reach, and he has vomited freely. Has had several dejections, three at least, since last visit. Ordered bits of ice to be placed in his mouth instead of permitting him to drink. Pulv. opii gr. i, to be repeated every hour if he does not drink.

August 13th. Face less collapsed; hands a little less shrivelled, but cold and clammy. He drank during the night from the bottles placed at his feet. Slept a little towards morning. Pulse 98, a little fuller than last evening. Tongue clean, warm; no tenderness or pain in abdomen. Has had but one dejection, but has vomited several times. Has a sensation of phlegm in throat, and has frequently expectorated. The sputa appeared tough, and are free from any tinge of blood. Ordered rice water to be given as an enema, with morph. sulph. gr. $\frac{1}{4}$. If at the end of an hour he is still awake and restless, the enema to be repeated with morph. sulph. gr. $\frac{1}{2}$.

1 P.M. Patient disliked the enema, and but a small portion was given, which was retained. No attempt was made to repeat it. He has not slept, and his aspect is still that of delirium tremens. Pulse 120, very feeble; pulse contracted; conjunctiva natural; face not moist; tongue a little loaded with a brownish coat; hands and feet cold and moist; no dejections. He has been allowed to drink water, contrary to my express directions, and has vomited so often as he drank. Ordered morph. sulph. gr. $\frac{1}{2}$, to be given in solution by the mouth, and repeated if ineffectual.

9 P.M. No tenderness of abdomen. Some small, dark, fluid dejections. He has not been properly watched, and has constantly been jumping out of bed in a state of excitement. Has vomited. General aspect unaltered. Slight brownish fur on tongue. Extremities cold. Ordered hot bricks to be placed about his limbs. Morph. to be increased to three-quarters of a grain, and repeated if requisite.

14th. Has not been watched during the night, but sometimes left alone. He has, therefore, been restless. Pulse 140, more feeble. Tongue a little dry, slightly furred. Has some tremulousness of hands. Rises for his dejections with more difficulty. Has passed urine with his dejections, but with difficulty, and in small quantity. Several small dejections, containing a few small lumps of faecal matter. Emesis has occurred a number of times. He seems inclined to spit quite frequently. I ordered that he should not be left alone. The room to be darkened, and morph. sulph. gr. i to be given.

1 P.M. Has not slept. Face has a more collapsed aspect. Pupils moderately contracted. Tongue as this morning. Pulse 94. No pain. No dejections. Has vomited greenish fluid. He has not been watched, and is more delirious. Thinks persons are concealed near his chamber, and persists in rising from his bed to eject them, as soon as he is left alone; but he is easily controlled, and answers rationally when spoken to. He has some desire for food, and, as his stomach rejects fluids, I allowed him to have a small piece of biscuit, which he said was good.

On calling at six P.M., I was informed that he died about half-past four. Soon after I left him, he went down stairs, and, on being induced to return, he fell, as his wife stated, in a fit. This was recovered from, and he died very tranquilly.

Autopsy twenty-four hours after death.—Present, Drs. Storer, Buckingham, and Thayer.

Brain healthy in aspect and consistence. The falx cerebri was wanting for the distance of about an inch at its anterior extremity, and the two hemispheres were united at this point. Considerable fluid was effused beneath arachnoid, but no effusions into the ventricles. Heart and lungs healthy; the latter remarkably so. Liver pale, rather friable. Spleen shrivelled, as in cases of death from cholera. The stomach was contracted, for the extent of about two inches, at its middle portion, having the form of a dumb-bell. The contracted portion was about two fingers in width. It contained a small quantity of bright yellow fluid, having the consistence of thin gruel. Its larger and smaller curvatures presented patches of dotted injection, of a bright crimson tint. The dots could be seen, on close inspection, to be made up of vessels. No ulceration, and no ecchymosis. Mucous membrane a little softened in the neighbourhood of the most vivid red patches. Patches of beautifully arborescent vascularity were observed at intervals along the whole course of the small intestine, but its mucous membrane retained its normal consistence. Large intestine healthy. No ulceration in any portion of intestinal canal. Lower portion of œsophagus not injected, nor its lining membrane

softened. Bladder contracted, containing about a drachm of turbid urine, which Dr. Dalton found, on examination with the microscope, was rendered cloudy the presence of a large quantity of epithelium scales, and similar to the urine found in the bladder after death from cholera. Other organs healthy.—*American Journal of Medical Sciences*, 1851.

CLXVI.—CASE OF STRICTURE OF THE URETHRA, IN WHICH THE OPERATION OF DIVISION OF THE STRICTURE BY EXTERNAL INCISION, WAS FOLLOWED BY A FATAL RESULT. By R. J. MACKENZIE, F.R.C.S.E., Junior Ordinary Surgeon to the Royal Infirmary, Edinburgh.—The following account of this case was read at a meeting of the Medico-Chirurgical Society, on the 15th of January. The details of the case are given partly from short notes of my own, but chiefly from a very accurate report of the case made by my house-surgeon, Dr. Harley, in the hospital journal:—

Andrew Cree, a labourer, æt. 41, was admitted into the Royal Infirmary, under my care, on the 4th December last, labouring under stricture of the urethra.

He stated, that he had been treated for stricture twelve years before, and that, under the use of bougies, which were occasionally passed for about a twelvemonth at that time, his condition was so much improved, that he suffered little annoyance from the stricture.

He remained tolerably well for two or three years, when the difficulty of voiding his urine began to increase, and for the last two years his symptoms had been much more urgent than at any previous period.

At the time of his admission into the hospital, the calls to void his urine were nearly constant, day and night, and his water was passed (frequently involuntarily) either in drops or in a very small spiral stream.

On the day of his admission, I examined his urethra, and found a stricture, about three inches from the orifice of the urethra, through which I was unable to pass the smallest-sized instrument.

On the 6th (two days afterwards) I passed No. 1 bougie into the bladder, and found that a second stricture existed at the bulb. Around each stricture a considerable degree of induration existed. The induration anterior to the scrotum appeared to extend along the urethra for about an inch, but was most strongly marked about three inches from the orifice of the urethra, where a narrow band seemed to grasp the instrument tightly.

On the 9th, I passed No. 2, and on the 15th, No. 3,—each time with very considerable difficulty, the instrument, after being passed into the bladder, being so tightly grasped, as to require a considerable amount of force to withdraw it.

The condition of the patient was now greatly improved. He was able to retain his urine perfectly, and did not pass it oftener than twice or thrice in the twenty-four hours, and in a tolerably good stream.

After each instrument was passed, however, he suffered from long-continued rigors, which were generally followed by slight temporary febrile disturbance. On one occasion I was obliged to suspend the use of the bougie for four or five days, on account of one of these febrile attacks.

Between the 15th and 31st December, I repeatedly attempted to pass No. 4 bougie, but invariably failed in passing it through the anterior stricture, although as great a degree of force was employed in the attempt as appeared to me justifiable. No. 3 was several times passed into the bladder, but was grasped on each occasion as tightly as at first. The induration around each stricture remained undiminished.

Under these circumstances, the case appeared to me to be one peculiarly suited for the operation proposed by Mr. Syme,—the division of the urethra, upon a grooved director, by external incision.

The patient having acceded most willingly to the proposal, I had a grooved staff made of the size of No. 3 bougie, and ascertained by one or two trials that it could be passed through both strictures into the bladder.

On 31st December, the patient being, as far as I could judge, in an excellent condition for the performance of the operation, retaining his urine for ten or twelve hours at a time, his tongue clean, and his pulse natural, I performed the operation in the presence of Mr. Syme and my other colleagues in the hospital.

The grooved staff being introduced into the bladder, the patient inhaled chloroform, and was placed in the usual position as if for the operation of lithotomy. I made an incision, about an inch in length, over the anterior stricture, and after feeling the groove of the staff through the urethra behind the indurated constriction, I inserted the point of the knife at this point, and ran it forwards along the groove, dividing the constricted portion of the urethra

till the resistance offered to the knife was entirely overcome. The extent of this stricture was greater than I had expected, the indurated part of the canal, which I divided, being fully an inch in length. To make sure that I had divided the whole stricture, I slid a director gently both backwards and forwards along the groove of the staff at the extremities of the incision. The bleeding from this incision was very trifling (I should think not above half an ounce). I then made a second incision over the situation of the bulb, of about an inch and a quarter in length, and proceeded in the same manner, entering the knife behind the induration around the stricture, and passing it forwards till the resistance offered by the indurated tissues to the edge of the knife was overcome. The extent to which the urethra was divided in this incision was about half an inch. I then withdrew the staff, and introduced No. 8 catheter into the bladder, and satisfied myself that it slid freely backwards and forwards along the urethra. The catheter was retained in the bladder by the usual fastenings, and the patient was removed to his bed. The bleeding which took place from the second incision was more copious than from the first, but the blood lost during the operation, from beginning to end, did not altogether exceed four ounces. The bleeding continued for a little after the patient was put into bed, but its amount was very trifling, and it soon ceased spontaneously. A plug was placed in the mouth of the catheter, and withdrawn occasionally by the patient to allow the urine to escape.

On the following day, at the hour of visit, he was remarkably well; he had slept well during the night, and had no complaint of any kind.

On the 2nd of January (the second day after the operation) I withdrew the catheter. The patient was as well as on the previous day.

On the 3rd, I found that he had had a slight rigor in the morning, which had been followed by a little febrile disturbance. At the hour of visit, however, he seemed to be going on quite well. His pulse 78, and soft, and the urine passing freely, both by the posterior wound and by the natural outlet. Both wounds had a perfectly healthy appearance.

About ten o'clock in the evening, I received a message from Dr. Harley, saying that some alarming symptoms had suddenly made their appearance. On going to the hospital, I learnt that during the afternoon he had had a severe attack of shivering, after which he complained of giddiness, and his countenance assumed a look of anxiety. It was not, however, till the evening, about nine o'clock, that any alarming symptoms made their appearance. He then suddenly became pale, his features contracted, his pulse very rapid, and scarcely perceptible at the wrist. When I saw him at ten o'clock, he had all the appearance of a patient suffering from the shock of a severe injury; he was quite sensible; the surface of the body was cold and clammy; his features shrunk; the pulse was scarcely perceptible at the wrist; he complained of a choking sensation, and had all the aspect of a dying man. He had passed water freely in the afternoon; there was no distension of the bladder; both the wounds had a perfectly healthy appearance; there was no swelling in their neighbourhood; no swelling or induration of the perineum, or in the prostate, when examined by the rectum. The sheets were stained by a few drops of blood from the wound in the perineum. Warm bottles had been placed around him, and brandy had been freely administered. I desired that this treatment should be continued, and that he should take in addition some camphor mixture with carbonate of ammonia.

In a few hours he had rallied somewhat; his pulse became more perceptible, and he felt better.

At visit the following day he was better; his pulse very rapid, but quite perceptible at the wrist. He had passed water freely, but in small quantity, both by the wounds and the natural outlet. Mr. Syme saw him with me, and, with myself, was satisfied that nothing could be detected in the perineum to account for the constitutional symptoms. The wounds had the same healthy appearance as on the previous day. The same treatment was continued, and he improved a little during the afternoon, till about four o'clock, when he again suddenly sunk into the same state of collapse as on the previous evening; and, in addition to his previous symptoms, the stomach now rejected all fluids as soon as they were swallowed. Sinapisms were applied to the epigastrium and to the calves of the legs. On visiting him about eight in the evening, I found that the vomiting had continued constantly since the afternoon, and had not been in the least degree checked by creosote and some other remedies which had been given. He was now evidently dying. The whole surface of the body was perfectly cold; the pulse was not perceptible at the wrist, and scarcely so at the axilla; his breathing was laboured

and very rapid, and his breath cold; he had constant hiccough, and vomiting of a dark greenish-coloured fluid; his countenance was sunk, and he had very much the appearance of a patient in the last stage of cholera.

Being at a loss to account in any way for the presence of these symptoms, it occurred to me that, if it were possible to maintain his strength for a time, he might still rally from the state of prostration in which he now was, and the only means by which it appeared to me that this object could be attained was transfusion. In this opinion Dr. Graham Weir, who was with me, concurred; and, with his assistance, from ten to twelve ounces of blood were safely transferred from one of the porters of the hospital into the veins of my patient. The effects of the transfusion on the patient were immediate, though not strongly marked. He said immediately that he felt "warmer and stronger," and in a short time his pulse was felt at the wrist, regular, and about 126 in the minute. The vomiting became less urgent, but again returned towards morning, and continued till the following afternoon.

On the following day (the 5th), at the hour of visit, his extremities were still cold, and his pulse of the same frequency, and weak. He had passed a small quantity of urine by the wound voluntarily, and without difficulty.

On the 6th, his appearance was decidedly improved. His pulse was 100, regular, and much stronger. He had still, however, a good deal of hiccough, and his countenance had an increased look of anxiety.

In the evening his pulse had fallen to 88; his tongue was clean and moist; he had taken some nourishment with relish, and had passed a larger quantity of urine freely by the natural outlet. The healthy appearance of the wounds continued, and the perineum and prostate were free from swelling or induration.

On the following day (the 7th), I found him much worse. His pulse was rapid and irregular; his tongue brown and dry; the surface of the skin over the whole body was of a bright scarlet hue; there was a suppression of urine, with muttering delirium, and *subsultus tendinum*. He gradually sank, and died at 8 P.M. on the 7th (the eighth day from the performance of the operation, and three days after the transfusion).

A *post-mortem* examination of the body was made by Dr. Gairdner on the following day.

The abdominal organs, including the kidneys and ureters, were healthy without exception.

The skin being reflected from the genital organs, the penis was divided about two inches from its orifice, the pubes sawn across on each side, and the whole urinary organs removed. The surface of each wound in the urethra had a grey sloughing appearance, which, however, was confined to the immediate neighbourhood of each wound,—there being no suppuration or sloughing of the texture of the *corpus spongiosum* or bulb, or in the cellular tissue immediately surrounding these parts. The deep perineal fascia, and the textures around the *levator ani*, were free from any morbid appearance. The anterior incision of the urethra was from an inch and a quarter, to an inch and a half in length—the posterior about half an inch. These incisions were found, on laying open the urethra, to correspond in length to the extent of the constricted portions of the urethra,—the anterior stricture being an inch and a quarter in length, and much narrower at one point at its anterior extremity than in the remaining part of the stricture—the posterior stricture occupying the situation of the bulb, and about half an inch in length. A considerable degree of induration still existed in the sub-mucous tissues around each divided stricture.

The portion of the urethra between the posterior stricture and the bladder, was very much dilated; and the muscular fibres around the membranous portion of the urethra were strongly developed, giving this portion of the urethra somewhat of the fasciculated appearance presented by the inner surface of the bladder, in this as well as other cases of old-standing stricture of the urethra. The prostate and tissues surrounding it were perfectly healthy. The plexus of veins between the *levator ani* and prostate, were carefully examined, as well as the veins in the neighbourhood of the incisions in the urethra, but were not found to present any signs of inflammation. The bladder was contracted and empty. Its mucous coat was here and there slightly congested, and especially at one point, at its *fundus*, apparently from its having been in contact, at this part, with the point of the catheter. The muscular coat of the bladder was strongly developed, being uniformly about half an inch in thickness. In the substance of the muscular wall, above the peritoneal reflexion, on the posterior surface of the bladder, and a little to the right side of the mesial line, an abscess existed, containing fully a drachm of healthy pus. The posterior wall of this abscess was formed by the peritoneal covering of the bladder. On examining the pelvic

viscera, before they had been removed from the body, some slender and soft bands of lymph were observed uniting the most prominent part of the wall of this purulent collection to the peritoneal covering of the rectum. Lymph was also exuded on a small spot of the mucous membrane of the bladder, as well as in the sub-mucous texture forming the anterior wall of the abscess. A similar, but still smaller, exudation of lymph existed on the mucous membrane, a little below the opening of the ureter.

On opening the chest, about a quart of purulent fluid was found in the cavity of the right pleura, both surfaces of which were coated, to the thickness of about a quarter of an inch, with soft yellow lymph. The right lung was mostly flaccid and partially compressed, but presented several condensed nodules and points of congestion, which yielded a sero-purulent fluid on pressure. The largest of these condensed nodules was about an inch and a half in diameter, very deep purple externally, but presenting, at its centre, the greyish colour usually seen in the first stage of the secondary deposits, which take place as a consequence of purulent infection. On sections being made of the left lung, it showed a few small points congested and partially solidified yielding on section a frothy purplish grey fluid.

I have been further informed by Dr. Gairdner, that the blood in the ascending *vena cava*, when examined under the microscope, was found to contain structures similar in appearance to true pus corpuscles, and that a loose decolorised clot, found in the left auricle, and having an unusually granular opaque appearance, was found to contain similar corpuscles in large quantity. In both these situations, these bodies very much exceeded in numbers the ordinary proportions of white corpuscles in the blood.

On examining the wound at the bend of the arm, the edges appeared everted and slightly callous,—having, likewise, a greyish discoloured appearance. All the tissues around the immediate edges were perfectly healthy. The whole of the superficial veins throughout the arm were carefully examined, but neither their internal membrane, nor the blood within them, presented the slightest appearance of disease.

I need not apologise for having entered somewhat minutely into the details of this case, which I have considered it my duty to lay before the Society.

Its bearing upon the value of the operation proposed and advocated by Mr. Syme, must be judged of by those who have watched its progress, and who have now heard its details. I can only say for myself, that it will not deter me from repeating the operation in similar cases.

It must be said of this, I think, as well as of all other operations, however trifling, that it is not free from dangerous consequences. It is well known that small operations, such as the removal of a finger or toe, the excision of small tumours, and incisions of all kinds, have repeatedly proved fatal, and this most commonly from the complication which proved fatal in this case, the absorption of pus into the circulation.

The disease for which the operation is performed (confirmed stricture of the urethra), is one of a most distressing kind—one, which itself frequently proves fatal, and which, under the ordinary means of cure, is a tedious and frequently unsatisfactory subject of surgical treatment.

The operation, in the case I have related, has, it is impossible to deny, been directly productive of fatal consequences. It was performed at a time when the urinary irritation, produced by the disease, had been overcome by the partial dilatation of the urethra, and when the patient, as far as I could judge, was in a most favourable state for the performance of an operation. The operation was performed, and the after-treatment conducted, on the principles laid down by Mr. Syme, and which have been followed, in his hands, with so much success.

With regard to the transfusion, I must state that, had I known that the symptoms which existed were the consequence of *pyæmia*, I should not have thought of adopting such a measure. I resorted to transfusion when at a loss to assign any distinct cause for the state of extreme prostration which was present; and I think no one, who had seen the condition of the patient on the night of the 4th, could doubt that the effects of the transfusion were to prolong his life during the three following days.—*Edinburgh Monthly Journal*, March, 1851.

CLXVII.—DEATH FROM CHLOROFORM. By Dr. ASCHENDORF, of Hanover. A child, aged one year, suffering from a large vascular tumour, which extended from the front of the ear to the hyoid bone, had several times been brought into an anæsthetic condition by means of six drops of chloroform, for the purpose of reducing the tumour by means of six setons. No unpleasant symptoms had been induced by the use of the chloroform, and the tumour had already been reduced two-thirds of its size. Dr.

Aschendorf having determined on attempting a radical operation, again administered six drops of chloroform. The child did not seem to feel anything when the principal incision was made, but as it began to utter a moaning cry at the end of ten minutes, it was made to inhale three drops more of the chloroform, and in about eight minutes more the operation was completed. On taking up the child, it was observed to bend its head on one side; the muscles of the face were violently convulsed, the eyes were turned up, and the pupils dilated; the arms were at first rigid and extended, but soon became flaccid, and death supervened without the slightest pulsation, or even any rattling in the throat being perceptible.

Four days previously, Dr. Aschendorf had administered ten drachms of chloroform, in the space of an hour and a half, to a man aged forty-five years, whom he was going to cut for the stone, and this quantity not being sufficient to throw him into a state of anaesthesia, two ounces of sulphuric ether were inhaled through an inhaling instrument, but equally without effect. Dr. Aschendorf closes his report on the case by drawing attention to the various degrees of sensibility to the action of anæsthetic agents, manifested by different individuals. — *Casper's Wochenschrift*, 1850.

In relation to the use of chloroform, it may not be out of place to remind our readers that Ricord was the first who successfully tried the experiment of breathing into the mouth of a patient threatened with suffocation during an operation while under the action of chloroform. The following case, recorded by Dr. Bleek, affords further evidence of the benefit yielded by this simple method.

Dr. Bleek undertook the removal of a cancer from the breast of a woman aged forty-two years, who, in consequence of her own wish to take chloroform, had inhaled about half an ounce. The operation proceeded satisfactorily until the last incision was made, when the patient slid from the chair, and fell to the ground as if she were dead. Her countenance was pale and even livid; the lips, nails, and ears were dark purple, the eyes fixed, the pupils dilated, the iris immovable, no pulse to be felt at the carotid or the wrist. No breathing or pulsation could be heard. While the windows were being opened and water and hartshorn fetched by the attendants, Dr. Bleek laid his lips to those of the patient, and blew into the lungs, closing her nostrils with one hand, and, with the other pressing the larynx (and, therefore, also the œsophagus) against the vertebral column. After the fourth inspiration, the patient made a convulsive movement, and began to breathe regularly; the pulse again became perceptible, and the face recovered its natural colour.

Dr. Bleek continued the operation by removing a degenerate axilla gland, when the patient uttered a cry, although she subsequently stated that she had not been conscious of any pain. She recovered without any unfavorable symptoms.

The sitting posture, which in itself predisposes to syncope, would appear especially unfavourable in the application of chloroform; the majority of those cases in which death has occurred while the patients were under the action of chloroform, has referred to persons in a sitting posture, it is therefore very essential to operate on the patient while lying down, wherefore the horizontal position is at all admissible. — *Schmidt's Jahrbücher der Gesammten Medicin*, 1850.

CLXVIII.—RESULTS OF THE USE OF CHLOROFORM IN 9,000 CASES AT ST. BARTHOLOMEW'S HOSPITAL. — ONE of the most interesting questions connected with the subject of operative surgery, relates to the use of anæsthetic agents employed for the purpose of suspending the function of sensation. This question has assumed a moral, as well as a medical type. It has been urged, that sensation is a natural function of the living organism, and that to suspend it by artificial agency is to set at naught the ordinances of nature; and that man is born to suffering, as evidenced by the sensibilities of his body. If the soundness of this argument be admitted, it would be difficult to draw a line which would define the boundary at which moral and immoral suffering meet; or to say, in what form of suffering our remedial agents may be justifiably resorted to. The sensibilities of our frame are not given us by nature to the end of promoting pain, but to enable us to avoid it. Corporal suffering is no part of the discipline of the mind; nor can it even be generally asserted, that its excess exercises a salutary influence on the character. Every movement of our body instinctively points to the avoidance of bodily suffering; why, therefore, should we not as readily and unobjectionably employ the agency of anæsthetic medicines for the purpose of suspending bodily pain, under the circumstances of an otherwise painful operation, as we endeavour to mitigate the bodily suffering of any other patient, cast down on

a bed of sickness? Will not the objection to the anæsthetic action of opium to a region affected by a neuralgic pain, or to the system generally, hold as strongly, as that of another agent of the same principle, given to avert the pain of an operation?

The medical arguments against the use of anæsthetic agents, have a somewhat better foundation. That great and sudden determination to the brain, and an unnatural circulation of venous blood, result from their employment, is undeniable.

It is undeniable, if the quantity administered be large, and long continued, that symptoms resembling those of apoplexy present themselves, in the form of extreme congestion of the vessels of the face, stertorous respiration, and total insensibility; and it cannot be denied that, occasionally, its full administration leads to headache, vertigo, and languor of some days' duration; and cases are recorded in which death itself has followed in the course of an hour or more after its employment. It must be observed, however, in pursuing this question in strict accordance with the laws of evidence, that we have no *proof*, in the cases above referred to, that death was the direct effect of the supposed cause. The parties administering it, were not fully experienced in the mode of its application. They entertain the *opinion*, that death was referrible to it, while it cannot be disputed that the fatal issue may be attributable to other causes; and, in one example, it appears more reasonable to refer the death of the individual to a suspension of the function of respiration by violence, than to any obnoxious agent circulating through the lungs, or brain. On the other hand, the records of St. Bartholomew's Hospital point to its successful administration in upwards of nine thousand cases; in not one of which, including the aged and the young, the healthy, the infirm, and the asthmatic, has its employment left a stain on its character, as an innocuous agent of good. Under all circumstances, its careful employment may be unhesitatingly resorted to in all cases, excepting only such as are marked by determination to the brain of an apoplectic type; secondly, under circumstances of great and serious exhaustion from loss of blood; and, thirdly, in diseases of the heart. In these conditions of the system, it is perhaps better avoided.

The agent in general use is chloroform, and one word may be added as to its administration. It appears indisputable that its influence on sensation, precedes that on consciousness. I have employed it on several occasions, in which a patient has been conscious of all that has been passing around, and yet who has declared himself to have been totally insensible to pain. This state of his system has arisen from the moderate use of the agent, ample, indeed, for all purposes of utility, though somewhat difficult to regulate in quantity sufficient for the required object.

I prefer its gradual administration. I do not think it desirable to exclude atmospheric air, employed as a diluent during the process of inhalation. Its influence should be gradual, not sudden. I consider its application through the medium of a cambric handkerchief laid on the face, preferable to the use of instruments made for the purpose of excluding atmospheric air; and food should be rigidly avoided before its administration, otherwise sickness will frequently follow.

Against the occasional convictions or objections of others to its employment, I place the strong, and, to my own mind, the unanswerable fact, that it has been successfully used in so large a number of cases in St. Bartholomew's Hospital since the period of its introduction; that these cases have been indiscriminately taken, and that its objections have not yet made their appearance before the observant eyes of the medical staff of that institution, either by promoting danger during the operation, or protracting the recovery of the patient after it. In one class of cases, its employment is especially applicable, viz., in that form of disease in which the pain of an operation is the chief warrant for its non-performance, and in which the recovery from a chronic disease is left to nature, that might be greatly hastened by the hand of art; such, for example, as the removal of a piece of dead bone.

Up to the period of the introduction of chloroform, a surgeon was very unwilling to subject a patient to the painful process of sawing and chipping away portions of dead bone, with a view to reach the medullary cavity, because the operation was both a painful and a protracted one. The consequence was, that an hospital bed was occupied by a patient thus affected, for many months, to the exclusion, perhaps, of three or more claimants, who would have successively occupied it. But, by the aid of chloroform, the operation is now performed unconsciously to the patient, and the period of his recovery greatly abridged. With the three exceptions above mentioned, I cannot hesitate in strongly recommending its administration in all cases of large surgical operations, believing its discovery to be the greatest blessing conferred on the profession of surgery during the last century; and although

I have seen its employment pushed, on many occasions, to the apparent verge of apoplexy, I cannot say, even in such examples, that the good has not largely predominated.—*Skey's Operative Surgery*, pp. 16, 17, 18.

CLXIX.—HYDROCEPHALUS CURED BY HYDRIODATE OF POTASS. By J. ST. JULIEN GUERARD, M.D., of Beaufort, S. C.—In the whole list of "Opprobria Medicorum," there is no disease that holds a more conspicuous place than hydrocephalus; none that has more completely put to naught the well-directed skill of the physician. I have therefore deemed it highly imperative, that whatever is calculated to throw light on this affection, or which tends to elucidate its pathology or treatment, should be made known to the profession.

As my aim is to be practical and useful, I shall not enter into the polemics of the subject, but will content myself simply with detailing the treatment and results of a case, which occurred lately in the practice of my father, Dr. J. D. Guerard, of this place. On the 8th of February last, Mr. J. S. Perry sent in from his plantation to the doctor a coloured infant for medical treatment. The mother stated that her child was six weeks old, and had suffered severely during the month from a cold, which resulted in an enlargement of the head. On examination, the head was found a third larger than natural, and the sutures were all widely patulous; the fissure commencing at the root of the nose, and extending up the medium line of the os frontis to the anterior fontanelle, being an inch across. The fontanelle itself was capacious enough for three fingers. The coronal and sagittal sutures were also widely extended. The scalp covering these broad fissures was puffed and elastic to the touch, and indicated the presence of much fluid beneath. Dilatation of the pupils and strabismus, together with subsultus tendinum, and sudden screaming and tossing of the arms upwards, plainly denoting the nature of the little patient's affection. Also, the bowels were costive, and vomiting frequently occurred. This congeries of symptoms, so clearly evincing a case of hydrocephalus, determined my father at once to try the efficacy of the hydr iodate of potass; cases of the undoubted disease having been recorded as cured by this potent drug in your valuable journal. He accordingly ordered an ointment consisting of 25 grs. hyd. of potass to the ounce of lard, to be well rubbed over the whole head, twice in twenty-four hours. This to be gradually increased up to 40 grs. to the ounce. At the same time, a solution to be made by dissolving 20 grs. of the hydr iodate in $\frac{1}{2}$ of rain-water, and of this 10 drops to be given morning and evening. This treatment was continued up to the 3rd March, and no melioration of the disease occurring, blisters were now ordered to be applied to the cranium; first on one entire half and then on the other, and so alternating that one side of the head or the other was always under the influence of the epispastic. A couple of grains of the blue mass was likewise ordered twice daily, which kept the bowels in a tolerably active state. Very shortly after, symptoms of anasarca supervening, the unguent was directed to be rubbed over the thorax and abdomen. And now appeared the crisis of the case, a vesicular eruption broke forth over the entire body, the vesicles bursting and discharging pure lymph. From this critical discharge, the convalescence of the patient commenced, and the remedies being still continued, all the alarming symptoms gradually disappeared. About the middle of July, all remedial measures were discontinued, the case being considered as cured. The child was brought to town and examined two weeks since, and although there was still some obliquity of vision, I thought I had never seen a healthier and more sprightly looking infant. The sutures were almost all filled up with ossific matter, except the broad space between the two portions of the os frontis, and also the triangular space of the anterior fontanelle, but in both of these there is a hard, bony deposit on the dura mater below, and the cavity will soon be filled up, although not to a level with the superficies of the cranium. The forehead will always be marked with a deep sulcus in the middle. But the absence of all serous effusion from the head, or other parts of the system, and all symptoms denoting pressure on the brain, show that the hydrocephalic affection has been entirely removed, and the cure of the little patient made certain.

In conclusion, I would remark that the results of this case accord with those of other instances of hydrocephalus that have been treated by similar means, and that together they tend to show the complete curability of this dreadful malady even in its worst phases by the hydr iodate of potass. Doubtless its peculiar virtue depends upon its excitant action on the absorbent system, assisted probably in this case by the alterative powers of the blue mass that was also given. As a salutary deobstruent, and powerful *discusser* of all hydropic and other morbid products, I regard iodine and its preparations as vastly superior to mercury,

and as being one of the most potent weapons ever furnished by chemistry for the furtherance of our endless conflict with suffering, disease, and death.—*American Journal of Medical Sciences*, 1851.

CLXX.—NATURAL HISTORY OF GAMBIE.* (Extracted from M. Iier's Travels in China, unpublished).—The gambier, known also as *terrajaponica* and *catechu* (literally juice of a tree, from the Malay *kate*, tree, and *chu* juice) has nothing but its mode of preparation, in common with the cachou of India and China, the juice of Kina, and other similar substances, with which it has been by some authors very incorrectly classed. It is an aqueous extract of the terminal branches and leaves of the *nauclea gambir* of Hunter, or *uncaria gambir*, belonging to the family of rubiaceæ. This shrub varies in height from eight to ten feet; its leaf is oval, long, and thick, terminating in a point, the surface smooth, the *nervures* distinctly traced beneath, and of deep green. When chewed, it has a bitter astringent flavour, which afterwards leaves a sweetish taste. Its flowers are globular, agglomerated, composed of groups of numerous small flowers, the corolla of which, spotted at the base, are slit at their superior edge, and of a yellowish green. The flower has only five very short stamens; its pistil is longer than the corolla; it has no scent; the seed is abundant, of oblong form, compressed, and very small.

The gambier is chiefly cultivated in the islands of Penang, Singapore, Deutauy, Sumatra, &c. It especially flourishes on declivities, and accommodates itself to soil of moderate depth; at least it was in shallow earth of ferro-argilo-siliceous quality that I had opportunity of studying its culture in Singapore.

This shrub is propagated either by seed or slips; those reared in nurseries for three months and then transplanted are preferable. The plants are placed about six feet from each other.

It is not until the fourteenth month that the first crop of the small branches and leaves destined for decoction is cut. The second crop is yielded in eight months, after which, throughout the twenty years of a plantation's duration, it is cut every three months.

Outline of the expense of cultivating a gambier plantation of 5 hectares (10 acres):—

	Francs.
Clearing 10 acres of virgin earth by Chinese and Malay labourers	2,160
Wages of 6 Chinese labourers for cultivating the land ...	1,200
Rent of the land	41
Necessary implements and fuel	120
Buildings, sheds, &c.	300
Unforeseen expenses	200
	4,021
The second year the clearing will cost but	2,472

Total from the commencement to the return 6,493

The six workmen are, immediately after the planting, almost constantly employed in collecting the leaves and preparing the gambier, which will produce monthly at least about 900 kilogrammes, which, reckoning 29 francs the 100 kilogrammes, (the price which I paid in the Singapore market,) gives 261f. a month, 3,132f. a year.

The mode of preparing the gambier, as I have seen it practised at Singapore, is as follows:—The leaves and terminal branches of the shrub are placed, with some water, in a large, moderately deep iron cauldron, the margin of which has been raised by means of a cylindrical hurdle of osier, in the form of a large gabion, carefully lined and coated with potter's earth. A circular lid also of osier, and coated with *terre grasse*, covers and hermetically closes this cylinder; the whole is placed on a stove; the water is kept at boiling heat for six hours; the leaves, without being immersed in the water, are subjected to the vapour at a temperature of 101 or 102 degrees. The decoction thus made, the leaves are removed from the apparatus by means of a basket used as a ladle, (sieve?) and are placed in an inclined wooden trough, where they are washed in water, to remove all the soluble matter which may still adhere to them; this water is added to the decoction, and the whole is submitted to a certain heat, to concentrate the essence, which is then poured into a wooden mould, and stirred with a piece of wood, called by the natives *pouna*, and which has the property of attracting the extract *en masse*. When cold, they destroy the mould, and divide the extract by means of string, first into layers, and then into little cubes of an inch square, which are placed on a hurdle to dry.

* Dr. Charles Dumars, of Montpellier, has employed gambier with marked success, in intermittent fever, when all other remedies have failed.—Vide 'Institute,' vol. ii, page 94.

There are many different qualities of the extract of gambier; the most esteemed yields a paste of yellowish white colour, friable, staining the fingers, and of earthy appearance (whence its name, *terra japonica*), its flavour is rather bitter, with an after taste like Spanish liquorice. It is found in commerce, in the form of little cylindrical masses, of about three centimètres diameter, and one in height, retaining the print of the linen on which they have been dried. Once separated, they never again adhere to each other, as is the case in inferior qualities. This gambier comes from Siak, a Malay town, at the mouth of the small river of the same name, flowing on the north west coast of Sumatra, to the south of Pedang and Malacca. It is brought from the interior by the Klings, a Malay tribe. This kind of gambier, placed, with a piece of areka nut and a little quick lime, in a betel leaf, forms a masticatory, much used among the Malays, in Cambodia, Cochin China, and the interior of China. It acts as a tonic on the gums, excites an abundant flow of saliva, and renders the teeth black as ebony, which is much admired among most of the Malay tribes.

The second quality is produced in the neighbourhood of Rhio, a Dutch settlement in the Isle of Bentany. Its colour is of yellowish greenish white, when broken it has an earthy appearance, and is friable. Its flavour resembles that of the first quality.

The third quality, which is most common at Singapore, is in rectangles of from 3 to 4 centimètres long, and from 1 to 2 broad. Its colour is brownish yellow, or of a reddish brown. It sometimes melts, so that the cubes adhere to each other in consequence of the viscosity of a matter of resinous appearance, which is apparently formed by some mismanagement on the fire. Its flavour is astringent and sweet.

The gambier is employed in China for tanning skins and dying silk and cotton brown and yellow. The Chinese and Indian physicians employ it with success in *intermittent fever, diarrhœa, dysentery, and catarrhal affections.*—*Gazette Médicale de Montpellier.*

CLXXI.—A CASE OF TUMOUR IN THE BLADDER. By C. J. CLARKE, M.D., of Jacksonville, Alabama.—Cally Denson, farmer, a large man, aged sixty-two, apparently of good constitution, had enjoyed robust health until about two years ago, when he began to suffer from what he considered symptoms of "stone in the bladder." He voided urine with difficulty, having to strain hard to make it pass. By degrees he had to make water more frequently than usual, and suffered from constant sense of uneasiness about the bladder. These symptoms grew gradually a little worse in the course of the first year, during which time he used various domestic remedies for "gravel." After awhile he began to be troubled with constipation, for which he took cathartics; subsequently had hemorrhoids. About the end of the first year he began to notice "a hardness" in his abdomen just above the pubis, which gradually increased until he could distinguish a large roundish tumour. This he took to be an "obstruction in the bowels," as he had constantly to take some laxative to keep his bowels open. By this time he had great difficulty in voiding urine, and frequent calls to do so. Says that urine would sometimes suddenly stop while flowing, then flow again by changing his position; and that he was frequently in the habit of going to the corner of the fence and placing the perineum against the end of a rail and making pressure, which enabled him to void urine when he could not do otherwise. He has frequently had an itching sensation about the end of the urethra. Had very copious hæmorrhage from the bowels a few months ago, probably from the rupture of a hæmorrhoidal vein. Since then has not suffered much with the piles. Applied to a quack, who told him that the tumour in his hypogastrium was caused by his "melt," which had got down there; and that the hæmorrhage from the bowels "came from the melt."

His urine has never presented anything remarkable; has been higher coloured at some times than at others. Has never passed any gravel. Has been for two weeks taking a nostrum from another quack, who promised to dissolve the stone in his bladder and cure him. After taking this a few days, he passed some blood and a large amount of mucus in his urine. This "solvent," I happen to know, is a strong solution of a peculiar kind of caustic potash, called in this State and Tennessee "wetfire," where it has obtained some celebrity in the hands of certain empirics as a caustic and solvent for urinary calculi.

Some three weeks ago Denson began to have slight fevers, and to suffer more than usual with a pain through the tumour passing down towards the perineum. The pain has continued to grow worse, the desire to void urine more constant and urgent, until within the last week his sufferings have become almost intolerable.

January 1, 1845. To-day I saw the patient for the first time, and obtained the foregoing history from him. He now suffers a

constant, dull, heavy, aching pain through the tumour and perineum. He has to void urine every hour, and sometimes oftener; and it is done with great pain and straining, only a small quantity being passed at each effort. The flow of urine is assisted by pressing upwards and backwards on the abdominal tumour. Has constant fever rather of a typhoid character; some thirst; no alvine evacuations without taking medicine, and then it requires great straining to empty the bowels; countenance dejected; very low spirited; skin dry and hot; tongue rather dry, with red edges and thick fur on top; cannot turn in the bed without great pain; testicles and spermatic cord painful and much swollen. Upon examining his abdomen, I found a large tumour rising from the pelvis up to the umbilicus. Its surface felt perfectly even and smooth through the abdominal walls. I could not detect any elasticity, yet there was not a distinct sense of hardness. On introducing a finger into the rectum, a large tumour was felt filling completely the superior strait and upper part of the pelvis. It felt smooth and uniform, and distinctly elastic. I next proceeded to introduce a catheter. The instrument was arrested about the membranous portion of the urethra. At this point the passage was very sensitive, and the introduction of the instrument caused great suffering. After repeated fruitless efforts with different sized catheters, I took a very small bougie, and succeeded in passing it through what I took to be a stricture, and into the bladder. The bougie tapered, and when the larger part came to the strictured point in the urethra it would pass no further, consequently the end of the bougie merely reached the cavity of the bladder, without passing any distance into it. As the patient had suffered greatly from the attempts at catheterism, in consequence of the inflamed and highly sensitive condition of the urethra, I determined to put him on a course to relieve those symptoms, hoping afterwards to succeed in the introduction of the catheter.

I ordered him to sit in a warm hip-bath until it caused a feeling of faintness and relaxation, and repeat as often as his strength will bear it; a laxative to move the bowels: infusion diosmæ with spts. ætheri nitrosi; also some carbonate of soda; fomentations to abdomen.

After weighing all the symptoms and probabilities, I came to the conclusion that it must be one of those cases of retention of urine and enormously distended bladder, that occasionally occur in old men. It is true he had passed more or less urine every day in small quantities at a time. He was of the opinion that the whole amount passed each day was small, and there had been difficulty in voiding it for two years. And we know that old men sometimes suffer great distention of the bladder notwithstanding they pass some urine from day to day, but there is not so much passed as is secreted. I was further strengthened in my diagnosis from the fact that the abdominal tumour was perfectly uniform on its surface, that it presented precisely the shape of the fundus of the bladder greatly exaggerated, and though not elastic it did not give a sense of hardness to the touch. And further, the pelvic tumour examined through the rectum presented the shape of the "*bas fond*" greatly distended, and was highly elastic. The obstruction in the urethra I took to be a stricture, and supposed from several of the symptoms which have been previously narrated, that there might also be a calculus in the bladder.

Jan. 2nd. Says he feels better; that the warm bath has soothed him greatly, affording more relief than anything he has done before.

Is very feeble; had considerable fever last night; laxative has operated; had much straining at stool; has as much difficulty in passing urine as ever, but it is not of so high a colour. He insisted that I should not attempt to introduce the catheter for twenty-four hours longer, and allow him to continue the treatment prescribed on yesterday.

3rd. Found him no better; had considerable fever last night; is more feeble than on yesterday; was much exhausted this morning on coming out of the bath. I now attempted to introduce the catheter again, but after repeated and persevering efforts failed. I next tried to pass the small bougie, but could not even succeed with that. I now sent for Doctors Francis and Pelham in consultation. The doctors had great difficulty in satisfying themselves as to the nature of the affection. Thought there might be some kind of tumour in the bladder; but upon examining the elasticity of the pelvic portion, it was agreed that it must be a case of retention of urine; and at all events, if there was a tumour within the bladder, that it contained a fluid; and further, that as the symptoms were urgent and the bladder could not be expected to stand the great distension much longer, the only thing offering any prospect of benefit was puncturing through the rectum. He was accordingly placed across the bed, with his hips resting on the edge and his feet drawn up. Kneeling before him, I passed the index finger of my left hand up the rectum to the tumour.

Taking a small trocar and canula in the other hand, I guided it up, and placing it against the tumour, about $\frac{3}{4}$ ths of an inch from its anterior edge, pushed it in. I withdrew the trocar, and, lo! instead of urine, dark red, and rather thick blood poured slowly through the canula! The blood discharged was inodorous, and after standing a long time seemed a little thicker, but did not coagulate. Fully a quart was discharged without producing any effect whatever on the patient's pulse. The canula was withdrawn, and upon examination the pelvic tumour was in a measure gone and the parts flaccid. Dr. Pelham now suggested that this might be a large hamorrhoidal tumour that we had evacuated, and that we might now succeed in introducing the catheter. He then took a strong silver catheter, and after a persevering effort succeeded in passing it into the bladder, when to our astonishment, instead of urine, here came the same dark red blood again! The nature of the affection was now revealed. We had a large bloody tumour of some kind filling the bladder and distending it, until the *bas fond* filled the pelvis, and the base extended to the umbilicus, being as large as the uterus of a woman at the seventh month of pregnancy. After about a pint of blood was discharged it ceased flowing, but upon moving the catheter a little it commenced again. I now took hold of the instrument and found I could move it about through the mass, apparently breaking it up; and it seemed to require but little more force to break it up than would a mass of coagulated blood. At each time the instrument was moved and a fresh part broken the blood flowed more rapidly. Some parts seemed to be of firmer structure than others, and could not be broken down with the catheter, though none gave the feeling of ossific or cartilaginous hardness. In all about two quarts of this dark red blood were removed, lessening the size of the tumour considerably, but still leaving it very large. The evacuation of the blood did not appear to have any effect on the patient's pulse or strength. He said he felt easier, and that the weight and pain were less. We now left him under the use of fomentations and anodynes until to-morrow.

4th. Rested somewhat better; has suffered much less pain. Has not been compelled to evacuate urine so freely, but still has great difficulty. The urethra became plugged up once or twice from clots of blood. Is growing more feeble; had an alvine evacuation without so much straining as heretofore. At eleven o'clock to-day had a long shivering fit; his pulse sank, and he became covered with clammy perspiration. Says he has no pain now except when he moves.

5th. Had another rigor last night, and one this morning before day. Is greatly prostrated; pulse feeble; bathed in cold clammy perspiration; can scarcely speak audibly.

6th. Died this morning. His wife would not allow a *post-mortem* examination.

This rather curious and perplexing case fell into my hands a few years ago. It is now published, partly for the purpose of putting it on record as a singular case, and partly to prepare my professional brethren against similar difficulties in making out a diagnosis, should any of them meet with a case of the kind. It is much to be regretted that in many of our most interesting cases we are debarred the advantages of *post-mortem* examinations by the people for whose benefit we live and labour.

[There can be but little doubt that the tumour in the bladder in this case was a malignant fungous growth, but it is greatly to be lamented that a *post-mortem* examination was not allowed.—EDITOR.]—*American Journal*.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

(From the Registrar-General's Report.)

It appears from the return for the week ending last Saturday, that the mortality of London is now greater than is generally observed at this period of the year. The deaths, which, as shown in last report, had risen from 1,036 to 1,213, have undergone a not very considerable decrease, the total number now being 1,148. In the ten corresponding weeks of 1841-50, there is no instance in which they equalled this amount, the two highest numbers, which nearly approach it, having occurred in 1845 and 1849, when they were respectively 1,133 and 1,138. The average of the corresponding weeks was 1,035, which, if corrected for increase of population, becomes 1,129; and the 1,148 deaths of last week show an increase of 19 on this latter result.

A comparative statement of the mortality at different periods of life shows that the present increase affects both young and old, but especially persons in the middle stage of existence:—

Ages.	Deaths last week.	Deaths in the previous week.	Average of ten corresponding weeks (1841-50).
From birth to 15	503	501	452
" 15 to 60	383	413	339
" 60 and upwards	258	299	241

In the zymotic or epidemic class of diseases, the total number of deaths enumerated in the present return is 223; whilst the corrected average is 211. Small-pox was fatal in 19 cases, measles in 36, scarlatina in 19, whooping-cough, which still predominates in this class, and considerably exceeds the average, in 66. Diarrhoea numbers 17; while to fever, which happily has declined, 31 are ascribed. Two children, 3 persons of middle age, and 3 who had turned 60 years, died of influenza; being more than the usual weekly number at this season.

Of the 19 cases in which small-pox was fatal, 12 occurred under 15 years of age, and the remaining 7 between 15 and 47. It appears that in four of the cases recorded vaccination had been performed, and that the ages of the patients were respectively 13, 21, 36, and 47. At 4 Cottage-row, on 23rd February, the servant of a brewer, aged 21 years, died of "confluent small-pox (13 days), pneumonia (16 hours)." The Registrar adds, from information given by the brother of the deceased, that "he had been vaccinated when young, that it took remarkably well, and the cicatrix was still visible." A case of "confluent small-pox, unprotected," which occurred to a female servant, from Poplar-road, of the age of 22, proved fatal at the Small-pox Hospital, Holloway.

Amongst the various kinds of diseases, those which affect the organs of respiration continue to be most conspicuous, and they amount in this table to 281; in that of the previous week to 277; whilst the corrected average is only 215. The fatality of bronchitis has increased from 119 in the preceding week to 131 in the last; that of pneumonia from 98 to 104. Bronchitis has been much more fatal than in any corresponding week, having fluctuated in the last five years between 71 and 112. The mortality of consumption has been also aggravated in some degree, and amounts to 146, a greater number than has occurred in any corresponding week since 1845.

The widow of a soldier died in the Charing-cross sub-district, at the great age of 104 years. She had been married three times, and had been a widow 20 years.

The births of 784 boys and 807 girls, in all 1,591 children, were registered in the week. The average of six corresponding weeks in 1845-50 was 1,479.

OBITUARY.

On the 24th inst., at his father's residence, in St. Peter's, Thanet, William Trew, Esq., surgeon, of Marlow, Bucks, only son of Thomas Trew, Esq., aged 36, deeply lamented by his family and friends. Mr. Trew was one of the members of the College of Surgeons, who accepted the honorary fellowship.

APOTHECARIES' HALL.

The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 27:—Henry Walker, Ludlow, Salop; William Falshaw, Haslingden, Lancashire; Nevill Jackson, Stamford, Lincolnshire.

NOTICES TO CORRESPONDENTS.

Communications have been received from—

Dr. BURNETT, of Alton.

Dr. BUTLER LANE, Ewell.

Mr. ASHTON, Walton-le-Dale.

Mr. WILDASH, Wye.

Dr. BARKER, Bedford.

Dr. MANSELL, Guernsey.

Dr. D'ALQUEN.

JOHN SPENCE, Esq., Bedale.

E. U. WEST, Esq., Alford.

JAMES GLAISHER, Esq., Royal Observatory, Greenwich.

— HUNT, Esq., Bedford-square.

— TUCKER, Esq., Berners-street.

GEO. KING, Esq., Bath.

P. P., on Curiosities of Medical Practice. &c. &c.

To whom the Editors desire to return their best thanks.

ERRATA IN OUR LAST NUMBER.

In the Advertisement, "A Distressing Case," second page, for J. A. Carter, Esq., read J. A. Curtis, Esq.

The names of Messrs. Williamson and Stedman, of Sharnbrook, as subscribers of one guinea, per Dr. T. Herbert Barker, of Bedford, were also omitted.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRIC RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES. METEOROLOGICAL TABLE FOR THE WEEK ENDING MARCH 1, 1851.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Column of the Barometer above Level of the Sea.	TEMPERATURE OF AIR.										MEAN TEMPERATURE OF VAPOUR.				MEAN TEMPERATURE OF VAPOUR.				AUTHORITIES AND NAMES OF OBSERVERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				Mean reading of the Barometer, corrected to 32°	Highest Barometer.	Lowest Barometer.	Range of Barometer.	Mean elastic force of Vapour.	Highest.			Lowest.			Range in the Week.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily.	Mean.	Evaporation.			Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean degree of Humidity (saturation = 1).	Mean weight of a cubic foot of Air.	Mean amount of Cloud. 0-10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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At Norwich the results are deduced from observations made on six days only, and therefore they are not strictly comparable with those at the other places.

Both the daily and weekly ranges of temperature at Jersey and Guernsey differ very much, and those of the last mentioned place are smaller than at any other place. It is believed by the observer at Jersey that the asserted difference of climate between those places does not exist, and he mentions the fact that melons will grow well and ripen their fruit in the ordinary gardens at Jersey, but at Guernsey they require the protection of glass. It is very desirable that this apparent difference should be confirmed or otherwise, and to this end it is requested that the observers at these places will give full particulars of the instruments used, and their

relative positions to walls or objects by which heat can be conducted or reflected to them, and also the means adopted to prevent the effects of radiation influencing their results.

The highest readings of the thermometer in air were 57° at Jersey, 54° at Lewisham, and 54° at Uckfield and Norwich.

WEEKLY METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Feet.	Mean Height.	Mean Latitude.	Mean Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Temperature.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of air.	Mean additional weight of Vapour required to saturate a cubic foot of air.	Mean degree of Humidity.	Mean weight of a cubic foot of air.	Mean amount of Cloud.	WIND.		RAIN.	
																			General Direction.	Average Strength.	Average number of days it fell.	Average fall.
Truro and Exeter.....	98	50.31	50.60	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	0.231	SE. & NE.	1.0	1	in.
Southampton to Hartwell.....	155	52.45	29.991	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	NE.	1.0	1	0.054
Cardington to Hawarden.....	158	52.43	30.007	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	NE. & NW.	1.0	2	0.122
Manchester to Stonyhurst.....	213	53.40	30.015	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	NE.	1.0	1	0.061
Liverpool and Whitehaven.....	213	53.40	30.015	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	SE. & NW.	1.5	..	..
Glasgow and Dunino.....	186	56.4	30.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	SE. & NW.	1.5	..	2.5

* (Dunino.) These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

At JERSEY, the thermometer on the grass was 31 deg. on the 23rd, 29 deg. on the 27th, and 32 deg. on the 28th, and March 1st. The whole amount of rain-fall in February, was 0.97 in., and the number of days on which it fell 7. There was a slight hail shower on the 27th, but for the last three weeks, there has been no rain, with the exception of one or two trifling showers. On February 28th, I dug a good dish of new potatoes from the open ground.

At GUERNSEY, on the 23rd, cloudy and sunshine alternately; light breeze, 24th, cloudy and clear; evening misty. 25th, overcast, misty and calm; evening, wind S.W., rain. 26th, A.M., gloomy, fresh breeze; P.M., cloudy and sunshine. 27th, cloudy and sunshine; fresh breeze. 28th, A.M., clear, fresh breeze; P.M., cloudy and sunshine. March 1st, cloudy and sunshine, with wind.

At TRURO, 23rd, fine throughout, blowing fresh and keenly; cirrus extensive after 4 P.M.; night fine, wind moderate. 24th, A.M., early fair; towards midday, damp; fresh wind; P.M., fair; after 4 P.M., flying scud; night similar; towards morning, rainy. 25th, A.M., rainy till 10 (wind was westerly throughout the day, but shifted again to E. in the night); P.M., fair; night cloudy. 26th, A.M., fine; P.M., fine; night fine (barometer rose 0.57 from 9 A.M. on 25th, to 9 A.M. 26th). 27th, A.M., frost (hoar), bright; P.M., fine; night fine, frosty. 28th, A.M., fine; P.M., fine; night, fine, frosty. March 1st, A.M., fine, except a few drops of rain, cumulo-stratus; P.M., similar; a few hail-stones fell about sunset; night fine, frosty.

At EXETER, the week has been cold, dry and fine.

At SOUTHAMPTON, 23rd, fine day with strong East wind. 24th, dull till noon, then fine. 25th, drizzling rain at intervals all day. 26th, fine day, with N.E. wind. 27th, fine. 28th, cloudy; slight fall of snow in the night. March 1st, dull.

At UCKFIELD, 23rd, fine morning; brisk East wind; fine day and night. 24th, densely overcast and showery; fine, P.M., overcast night. 25th, fine morning, and warmer; overcast evening and night. 26th, fine day; cold N.E. wind; a few flakes of snow from passing nimbi (first snow this winter!). 27th, fine morning; slight snow showers; fine day; sleet falling at night. 28th, overcast day, evening and night; a little granular snow. March 1st, brilliant morning, but a very dense haze; cold wind; fine day. The lowest reading of a minimum thermometer placed on the grass, during the week, was 20 deg. on the 27th. The cardamine pratensis, ranunculus ficaria, and mercurialis perennis are in flower.

At LEWISHAM, the 23rd was almost cloudless; the 24th was overcast till noon, and partially clear afterwards. The 25th was overcast; fog in the morning. 26th, partially clear in the morning, overcast afterwards. 27th, generally overcast. 28th, snow fell in the evening. March 1st, nearly free from cloud till noon, and generally clear after 9 P.M.

DAILY DIRECTION OF THE WIND AND FALL OF RAIN:—

Names of Stations.	FEBRUARY.							RAIN.		
	23	24	25	26	27	28	1st M	Fall in the week	Fall from 1st Jan.	No. of days it fell from Jan. 1.
Jersey	E.	S.E.	S.E.	N.E.	N.E.	N.	N.	in.	in.	26
Guernsey	N.E.	S.E.	N.E.	N.E.	N.E.	N.E.	N.W.	0.056	6.323	28
Truro	S.E.	S.E.	S.E.	E.	E.	E.	E.	0.380	10.658	37
Exeter	S.E.	S.	N.E.	N.	N.	N.	N.	...	4.610	34
Southampton	E.	S.	S.E.	N.E.	N.E.	N.	N.	...	6.670	...
Uckfield	E.	S.E.	S.E.	N.E.	N.E.	N.	N.	0.130	5.360	27
Lewisham	E.	S.E.	E.	N.E.	N.W.	N.W.	N.W.	0.084	3.940	31
Greenwich	E.	S.E.	E.N.E.	N.E.	N.E.	N.	N.W.	0.110	3.324	29
St. John's Wood	N.E.	N.E.	E.	N.E.	N.	N.	N.E.	0.050	4.396	26
Radcliff Obs.	N.E.	Var.	N.N.E.	W.E.	N.	N.E.	N.	...	...	...
Hartwell	E.	S.E.	N.E.	N.	N.W.	N.	N.W.	...	3.345	21
Cardington	S.E.	S.E.	N.E.	N.E.	N.W.	N.	N.	...	2.565	22
Norwich	S.E.	N.W.	N.E.	N.	N.W.	N.W.	N.W.	0.190	2.910	31
Nottingham	E.	N.E.	N.N.E.	N.	N.	N.W.	N.W.	0.088	2.616	31
Grantham	E.S.E.	E.S.E.	E.N.E.	N.E.	N.E.	N.	N.W.	0.110	2.255	26
Hawarden	E.S.E.	S.S.W.	E.N.E.	E.N.E.	N.	N.W.	N.W.	0.200	4.100	22
Liverpool Obs.	S.E.	S.E.	E.N.E.	E.N.E.	N.N.E.	N.W.	N.W.	0.120	...	...
Manchester	E.	E.	E.	E.	N.	N.	N.E.	0.009	4.827	32
Wakefield	E.	N.	N.E.	N.E.	N.	N.E.	N.	0.175	2.418	35
Stonyhurst	E.	N.E.	E.N.E.	N.N.E.	N.W.	N.W.	N.	...	9.660	36
Glasgow	S.	S.E.	S.E.	N.E.	N.E.	N.W.	N.W.	...	9.370	38
Dunino	S.	S.E.	S.E.	N.E.	N.E.	N.W.	N.W.	...	3.900	23

At EXETER.—By an erroneous reading of the fall of rain, the previous returns have been wrong.

At ST. JOHN'S WOOD, on the 23rd, hoar frost; fine afternoon. 24th, overcast. 25th, fine, but hazy. 26th, overcast till the evening. Some snow fell on the 27th. The 28th and March 1st were cold. Doves have young ones out of doors a week old.

At HARTWELL, the 23rd was a fine day; zodiacal light seen in the evening. The 24th was mostly overcast. 25th, fog in the morning; rain in the evening. 26th, some snow fell during the morning; zodiacal light was seen in the evening. 27th, snow was falling occasionally till afternoon; frost at night.

28th, overcast till the evening, and some snow fell at night. March 1st, a sharp frost; the sky was partially clear after noon.

At NORWICH, 24th, rime in the morning; partially cloudy, A.M.; overcast and light rain, P.M. 25th, thick fog; fair, A.M.; overcast and wind, P.M. 26th, fair, but high wind all day. 27th, fair; A.M.; overcast, P.M. 28th, fair, A.M.; a slight fall of snow, but did not remain on the ground. March 1st, fair, A.M.; the ground just covered with snow; the rest of the day squally, with rain and sleet.

At NOTTINGHAM, 23rd, fine sunshine, few cirri, cloudless after sunset. 24th, overcast, few drops of rain. 25th, rain, but not heavy. 26th, fine, windy, with rocky cumuli. 27th, fine, few light showers, but nothing to measure; few small snow flakes. 28th, dull, light hail shower P.M.; 11, another; frosty, cloudless night. March 1st, dull; cold, cloudless night. The cold weather this week has checked vegetation. Apricots just in bloom; primulas in flower; white violets in flower. Colds are prevalent.

At GRANTHAM, 23rd, a very fine day, but the air sharp. 24th, a dull, raw day, a few drops of rain. 25th, damp, fog most of the night, rain since 7.30, A.M.; very dull. 26th, a fine morning, the sky rather hazy, a fine day. 27th, a few flakes of snow in the night; a dull, cold day, sleet showers at intervals, and a few flakes of snow; sunshine at intervals. 28th, sunshine at intervals, but cold; patches of haze. March 1st, slight haze; a dull, cold day.

At LIVERPOOL, 23rd, A.M., hoar frost, cirro-cumulus; P.M., clear and frosty. 24th, A.M., hoar frost, cirrus; P.M., hazy till 7, clear and frosty after. 25th, A.M., overcast, with light rain; P.M., hazy, rain in the evening. 26th, A.M., frosty, with haze; P.M., cirro-cumulus and haze. 27th, A.M., frosty, cumulus, haze, and scud; P.M., hazy. 28th, A.M., frosty, cumulus, and haze; P.M., overcast generally, evening hazy. March 1st, A.M., cirro-cumulus, haze, and scud; P.M., cirro-stratus, cumulo-stratus, and scud.

At MANCHESTER, the 23rd and 24th were fine. The 25th dull; some rain fell in the afternoon; a cold wind, and the weather was variable to the end of the week.

At WAKEFIELD, on February 28th, a little snow, mingled with rain, fell in the evening, but it nearly all melted as it fell.

At GLASGOW, Frost on the 23rd, 24th, 26th, 27th, 28th, and March 1st. The weather was generally fine, and the sky clear. On the 25th there were a few drops of rain, but not sufficient to measure in the gauge.

At DUNINO, 23rd, A.M. clear and hoar frost; P.M. clear; 9 P.M. luminous in the north. 24th, A.M. cloudy, hoar frost; P.M. cloudy, cold. 25th, A.M. cumuli, light hail; P.M. clear, cold. 26th, A.M. open, a few snow flakes fell; P.M. partially clear. 27th, A.M. clear, open; P.M. cumuli and light hail from north-east. 28th, A.M. clear, open; P.M. open, cumuli. March 1st, A.M. clear, cumuli; P.M. cloudy, heavy squalls.

At BEDFORD, cases of rheumatic fever and influenza. Pulmonary affections, particularly among children, have been more frequent during the last few days.—T. H. BARKER.

At WAKEFIELD, influenza and rheumatism. During the month of February there were 1,202 fresh attacks of disease, distributed as follows:

	FEBRUARY.							FEBRUARY.						
	1 to 8 Days.	9 to 15 Days.	16 to 22 Days.	23 to 28 Days.	6 Days.	7 Days.	Totals for the Month.	1 to 8 Days.	9 to 15 Days.	16 to 22 Days.	23 to 28 Days.	6 Days.	7 Days.	Totals for the Month.
Abscess	4	4	11	3	22	1	45	Kidney Dis-	1	2	..	1	4	8
Ague .....	..	..	..	1	1	..	2	Laryngitis ..	..	..	1	..	1	2
Apthæ	3	1	..	..	4	..	8	Liver Disease ..	9	3	2	1	15	15
Apoplexy .....	..	..	1	2	1	6	10	Mumps	1	..	..	..	2	2
Astma	2	4	5	3	12	..	26	Nettle Rash ..	2	..	..	..	2	4
Boil	17	14	22	10	63	..	126	Neuralgia	13	13	15	7	48	48
Bronchitis	6	1	..	..	7	..	14	Ophthalmia ..	4	2	6	4	16	22
Cancer	20	28	39	19	106	..	182	Pericarditis ..	..	1	1	..	2	2
Catarth .....	..	2	..	..	2	..	4	Peritonitis ..	..	..	..	..	..	..
Chicken Pox .....	..	..	..	..	..	..	..	Phlebitis .....	..	..	..	..	..	..
Cholera	2	1	2	3	8	..	16	Phrenitis	1	..	..	..	1	2
Convulsions .....	..	..	2	2	4	..	8	Phthisis	2	..	..	..	6	8
Croup	1	..	1	..	2	..	4	Pleuritis	3	2	2	7	12	12
Delirium Tremens ..	..	..	..	..	1	..	1	Pneumonia	7	3	2	6	18	18
Diabetes .....	..	9	15	13	50	..	87	Purpura .....	..	..	..	..	..	..
Diarrhoea	1	2	2	2	7	..	12	Quinsey	5	5	4	1	15	15
Dropsy	2	6	5	3	16	..	32	Rheumatism ..	17	19	16	19	71	71
Dysentery	40	37	27	31	135	..	270	Roseola .....	..	..	..	..	1	1
Dyspepsia	1	5	1	4	11	..	21	Scarlatina	2	1	2	..	5	5
Enteritis	1	3	..	1	5	..	10	Serofula	4	4	3	3	14	14
Epilepsy	5	1	5	2	13	..	26	Skin Diseases ..	9	5	5	6	25	25
Erysipelas	16	15	12	11	54	..	108	Scurvy	1	2	..	..	3	3
Fever	4	2	..	..	6	..	12	Small-pox	2	..	3	1	6	6
Gastritis	4	4	2	2	12	..	22	Syphilis	4	1	5	3	13	13
Gonorrhoea	4	2	1	1	5	..	13	Teething	7	..	..	..	2	9
Gout	6	4	4	1	15	..	30	Tetanus .....	..	..	..	..	..	..
Hæmorrhage	3	2	4	2	11	..	22	Uterine Dis-	1	1	4	1	7	7
Hæmorrhoids	5	5	2	2	14	..	28	Unclassed	..	..	..	..	..	..
Heart Disease	4	6	7	1	18	..	36	cases	18	21	16	10	65	65
Hæmoptoe .....	..	..	..	..	..	..	..
Hæmoptoe	1	..	1	2	4	..	8	Totals	303	280	330	289	1202	1202
Hysteria	3	4	3	..	10	..	20	Daily Averages.	37.9	40	47.1	48.2	42.9	42.9
Influenza	24	33	66	104	227	..	427							
Insanity .....	..	..	1	..	1	..	2							

The arrangement of these attacks in periods nearly corresponding with the Meteorological Tables, is highly important. The regular development of influenza shown above, at the same time as the diminution of other diseases, is very interesting.

At GLASGOW, The city is still healthy.

At DUNINO, Croup and bronchitis are more prevalent than in former reports.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

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HEAD OFFICE, No. 7, ROYAL EXCHANGE, CORNHILL; BRANCH OFFICE, No. 10, REGENT STREET.

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Robert Cotesworth, Esq., Sub-Governor.
Edward Burmester, Esq., Deputy Governor.

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LIFE DEPARTMENT.

Actuary, Peter Hardy, Esq., F.R.S.

This Corporation has effected Assurances on Lives for a Period of One Hundred and Thirty Years; their first Policy having been issued on the 7th June, 1721, to William, Lord Bishop of Sarum.

Two-thirds of the entire gross profits are appropriated to the Assured, the Corporation retaining the remaining one-third; out of which they pay the whole expenses of management; thus affording to the public advantages equivalent to those derived from Mutual Assurance, without liability of partnership, and with all the security afforded by an old and opulent Corporation. Policies may be opened under any of the three following plans, viz.:-

The Old Series, under which Assurers are admitted at very moderate rates of premium, without participation in profits.

The Series 1831, under which Assurers are entitled, after the first five years, to an annual abatement of premium. The abatement at the last valuation was equivalent to a return of more than one-fourth of the premium.

The Series 1846, under which Assurers are entitled to participate in the ascertained profits at the end of every five years, and to appropriate their share thereof, either as an immediate cash bonus, as an addition to the sum assured, or, it may be made a matter of special arrangement, and applied in any manner most convenient to the parties assured. The First Division under this Series took place on the 31st December, 1850, and amounted, on an average, to a Reversionary Bonus, equivalent to about 53 per Cent. upon the amount of premiums paid.

FIRE DEPARTMENT.

FIRE INSURANCES may be effected at moderate rates upon every description of property.

MARINE DEPARTMENT.

MARINE INSURANCES may be effected at the Head Office of the Corporation. Policies for Sea Risks are also granted, claims on which are made payable in India and China, by the Corporation's Agents, at the following places:—Calcutta, Bombay, Madras, Canton, and Shanghai.

JOHN LAURENCE, Secretary.

VICTORIA LIFE ASSURANCE COMPANY,

18, KING WILLIAM STREET, CITY. Established 1838.

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Messrs. Barnard, Barnard, and Dimsdale. Commercial Bank of London. London and County Banking Company.

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Surgeons.—James Farish, Esq. John Dalrymple, Esq., F.R.S.
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Solicitor.—J. Curtis, Esq.

Assurers in this Company have the guarantee of an ample subscribed capital and careful and economical management. The success of the Society is manifest, from the fact that since its establishment more than 2,200 Policies have been issued, assuring over £1,300,000, while its assets stand at £125,000 and upwards, with an income of £30,000 a-year, steadily increasing.

The business of the Company embraces every description of risk connected with Life Assurance. The Premiums are moderate, and may be paid quarterly, half-yearly, or otherwise.

Credit allowed of one-third of the Premiums till death, or half the Premiums for five years, on Policies taken out for the whole of life.

Extra Premiums for Foreign Risks.—Persons assured with the Company may obtain permission to travel or reside in Canada, New Brunswick, Nova Scotia, New Zealand, Madeira, Malta, Cape Colony, and in other healthy foreign climates without payment of extra premium; also, with some limit, in North America (not south of the 35° of North Latitude) and in Australia.

Profits.—Bonus.—Four-fifths or 80 per cent. of the entire profits of the Company are appropriated to parties who have been assured on the profit scale for three clear years.

Loans.—Advances are made upon the Security of Freehold and Leasehold Property of adequate value, of Life Interests, Reversions, and other legally assignable property or income. Great facilities are also offered to Assurers for obtaining at small expense, and quickly, temporary advances on Personal Security.

WILLIAM RATRAY, Actuary and Secretary.

ENGLISH AND SCOTTISH LAW LIFE ASSURANCE AND LOAN ASSOCIATION.

12, Waterloo Place, London; 120, Princes Street, Edinburgh.

Established 1839.

SUBSCRIBED CAPITAL, ONE MILLION.

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A Comprehensive and Liberal System of LOAN in connection with Life Assurance, on undoubted personal or other security.
The Assured participate in two-thirds of the profits.

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The whole paid up and invested, and entirely independent of the amount of premiums received.

Insurances may be effected on single lives, on joint lives, and on the contingency of one life surviving another.

Insurances for short or limited periods may be effected at reduced rates, and with the least practicable delay.

(By Order of the Board)

London.

JOHN CHARLES DENHAM, Secretary.

PALLADIUM LIFE ASSURANCE SOCIETY.—

ESTABLISHED 1824.

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The Society now offers the following advantages:—

The Lowest Scale of Premiums which can be safely adopted.

EXAMPLE:—To assure £100.

AGE.	For one year.	For seven years.	For the whole life.
20	0 15 11	0 16 6	1 13 1
30	0 18 5	0 19 6	2 2 10
40	1 2 8	1 4 10	2 13 7

OTHER AGES AT PROPORTIONATE RATES.

Undoubted security, guaranteed by a large capital; an influential property; the long standing of the office; and the satisfactory results of its business.

Facility in the settlement of claims.

Liberty to travel in any part of Europe, without extra premium.

To those who desire to secure the advantages of a prospective bonus, by a small additional outlay, the deed of settlement assigns four-fifths of the profits.

Insurances effected on joint as well as on single lives, for short terms or otherwise, and to meet any specified contingency.

Premiums may be paid in one sum, or in any other equitable manner, to meet the convenience of the public.

The age of the life assured is admitted on the policy at the time of effecting the assurance, or at any other time, on production of satisfactory proof.

Every information will be given to assurers at the offices, No. 7, Waterloo place; or by the Society's agents in the country.

J. LODGE, Secretary and Actuary.

Printed by SYDNEY HEDLEY WATERLOW, of Gloster-terrace, Hoxton, in the county of Middlesex, at the printing-office of Messrs. WATERLOW and SONS, 66, London Wall, in the city of London, and published by THOMAS MARTIN, at the Office, East Temple Chambers, Whitefriars-street, in the precinct of Whitefriars, in the city of London.—Saturday, March 8th, 1851.

THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 11.

LONDON, SATURDAY, MARCH 15, 1851.

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MESSRS. LANE AND LARA, MEDICAL AGENTS, 14, JOHN STREET, ADELPHI, have always for disposal Practices, Partnerships, and such Businesses as are usually carried on by Professional men of all kinds, in every locality.

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Instructions for measurement and prices, on application, and the articles sent by post, from the Sole Manufacturers, POPE and PLANTE, 4, Waterloo-place, Pall Mall.

The Profession, the Trade, and Hospitals supplied.

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This excellent remedy, in addition to its extensive sale amongst the public, is also very largely used in Dispensing, for which the best form is in the stone-jars, (half-gall., 5s. 6d.; gallon, 9s. 6d.) specially adapted for the use of Surgeons and Chemists. To be had from the Manufacturers.

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Fellow of the Royal College of Physicians,
Physician and Professor of Materia Medica at Guy's."

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SYRUP OF THE IODIDE OF QUININE, is an effectual form of administering Iodine: the emervating effects are entirely obviated, Dose, $\frac{1}{4}$ drachm to 1 drachm.

SACCHARATED IODIDE OF IRON. Dose, 2 to 5 grs. 2s. per oz.

CITRATE OF QUININE AND IRON, Containing full quantity of Quinine. 5s. per oz.

AMMONIA-CITRATE OF IRON, 6s. per lb.

BIMECONATE SOLUTION OF OPIUM. Professional testimonials acknowledge this Preparation to be the most efficient sedative extant; the unpleasant effects of ordinary opiates are entirely obviated. Dose 11 to 30 drops, 8d. oz.

COTYLEDON UMBILICUS. The Solid and Fluid Extracts, 1s. 3d. and 1s. oz.; also the Preserved Juice, 5s. 4d. lb., as recommended by Mr. Salter, of Poole, in Epilepsy.

TARAXACUM.

The Fluid Extract prepared by the spontaneous inspissation of the pure Juice. When diluted it presents every characteristic of the fresh Juice, 6s. per lb.

J. T. Davenport, Operative Chemist to H.R.H. the Duke of Cambridge, 33 Great Russell-street, Bloomsbury.

ATLAS ASSURANCE COMPANY,

92, CHEAPSIDE, LONDON.

ESTABLISHED 1808.

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FIRE DEPARTMENT.

RETURNS.—Policies for £300 and upwards which may have been in force for one year prior to the date to which the Account is made up, will be periodically entitled to participate in the return of Surplus Premium.

DISTILLERIES, SUGAR HOUSES; and MERCANTILE PROPERTY, in the Docks; in Public or Private Warehouses; also SHIPPING in Harbour; assured for the Year or for any shorter period on advantageous terms.

FARMING STOCK is now exempt from Duty, and may be assured *without the average clause*.

On assurances for SEVEN YEARS by one payment, a deduction of one-seventh part of the premium and duty will be made.

LIFE DEPARTMENT.

The attention of the Public has, in the Advertisements and Proposals of this Company of late years, been called to a Table of Additions applicable to and expectant on Policies of particular dates and ages; the Directors now beg to submit the following statement of Claims *actually paid*, showing the Sums respectively assured, and the Bonuses thereon, and they request, in order to exemplify the advantageous plan of Assurance proposed by this Company, that Persons desirous of effecting Assurances on their Own Lives or on the Lives of Others, will compare the statement now submitted, with the Addition or Bonus of any of the other Offices which may apply to a Policy issued by them since 1816, when the Atlas Company adopted the Bonus System.

STATEMENT OF CLAIMS PAID ON POLICIES EFFECTED IN LONDON OR THROUGH AN AGENT IN GREAT BRITAIN.

No. of Policy.	Name of Life Assured.	Term of Years during which Bonus accrued.	Sum Assured.	Bonus.	Total Amount paid.	Bonus per Cent. on the Sum Assured.	Bonus equal to the undermentioned per Cent. per Annum on the Sum Assured.
213	His Majesty William IV.	14	3,000	1,068	4,068	35 12 0	2 10 10
69 & 92	His R. H. the Duke of York	7	5,000	962	5,962	19 5 0	2 15 0
1,458	Mrs. N. Hyde	20	400	284	684	71 0 0	3 11 0
5,610	Admiral Sir W. Sidney Smith ...	8	1,700	324	2,024	19 1 2	2 7 8
3,422	The late Duke of Argyll	14	5,000	1,453	6,453	29 1 2	2 1 6
3,604	The late Earl of Clarendon	13½	2,500	1,120	3,620	44 16 0	3 6 4
687	M. S. (Berks) ...	21	400	437	837	109 5 0	5 4 1
1,578	Rev. Thomas Crompton	20	500	350	850	70 0 0	3 10 0
7,828	William Gilles, Esq.	8½	500	197	697	39 8 0	4 12 9
756	George Jones, Esq.	21	5,000	3,754	8,754	75 1 7	3 11 6
1,915	Sir John S. Sebright, Bart.	25½	5,000	3,980	8,980	79 12 0	3 1 10
1,120	Nicholas Doidge	28	100	126	226	126 0 0	4 10 0
1,010	Rev. F. W. Blomberg, D.D.	28	3,000	3,596	6,596	119 17 4	4 5 8
6,059	Rev. Richard Tillard	18½	1,000	814	1,814	81 8 0	4 9 2
6,630	Ditto ..	16½	1,000	773	1,773	77 6 0	4 12 2
782	Mrs. Sarah Cope	33	1,000	938	1,938	93 16 0	2 16 10
5,073	James Price	21	200	208	408	104 0 0	4 19 0

Persons assured for the whole term of Life, for £100 and upwards, in Great Britain or Ireland respectively, will be entitled at the end of every FIFTH YEAR (INSTEAD OF EVERY SEVENTH YEAR AS HERETOFORE) to participate in the Surplus Premiums, either by ADDITION to their Policies, or an EQUIVALENT REDUCTION will be made in the future payments of Premium, at the option of the Assured.

Policies may also be effected for the whole term of Life by a limited number of yearly payments.

ASSURANCES FOR SHORT-PERIODS may now be effected in this Office at considerably reduced rates of Premium.

THE NEXT VALUATION will be made at Christmas 1854, and Policies effected before that date, will participate in proportion to the time they may then have been in force.

The Company's Rates and Proposals may be had at the Office in London or of any of the Agents in the Country, who are authorized to report on the appearance of Lives proposed for Assurance.

HENRY DESBOROUGH, SECRETARY.

92, Cheapside, August 1850.



LECTURES.

LECTURES ON THE GERMAN MINERAL WATERS

DELIVERED AT

THE HUNTERIAN SCHOOL OF MEDICINE.

By SIGISMUND SUTRO, M.D.,

Physician to the German Hospital.

LECTURE X.

MARIENBAD—FRANZENSBAD.

FROM Carlsbad, at the right superior corner of the celebrated Bohemian triangle, we journey southward to its inferior corner, Marienbad. The diligence, which leaves the former at 4 P.M., performs the distance of twenty-five miles in six hours; from this tardiness you already perceive that the southern pikropega must be situated in a more elevated position; indeed, its altitude over the North Sea amounts to 1,900 feet (800 feet higher than Carlsbad). Its latitude is below 50° ; its eastern longitude 12° . It belongs to the Pilsener Kreis (circle), which is chiefly spread over a mountain-plateau, at the foot of which the small river Tepl arises—a river we have already noticed in its course from the south to the north, through Carlsbad, till it widens and falls into the Eger. Extremely numerous gas and mineral springs are locally connected with layers of moor along its course. Travellers, destined from Eger (twenty-four miles to the west) to Pilsen, in the south-east, have to pass the spa. You see the demesne of Tepl in a due easterly direction (nine miles distant), and Königswarth, in the north-west (six miles off). You can enter Marienbad, from the ravine-like opening, in the south only: pine and fir-covered mountains forming a towering enclosure from the other sides. In the east, the Hamelika rises and mingles with the peak of the Wahrhall; in the north, the Mühlberg and Steinhau, and in the west, the Schneiderhau. The Hamelika brook, originating at the western declivity of the mountain of the same name, is joined at the extremity of the valley by the Schneiderbach, to form the Anschowitzbach (brook). The spa is of comparatively recent origin, and the buildings are provided with many modern comforts. An avenue of poplar trees leads from the Kreuzbrunnen (the chief source) to the Carolinenbrunnen. In the heat of summer many visitors would probably prefer the shade of chestnut or lime-trees, but a greater regard to health was displayed by the selection of the present species, as the surrounding mountains deprive this spot of the morning and evening sun. Too much shade might, therefore, prove undesirable. Reside where you will in the circumscribed spot, you are never far from woody walks, in which the surrounding mountains abound. From the Belvedere on the Steinhau, the prospect towards the west and south extends as far as the high Pfrienberg. Along the banks of the Anschowitz brook you will also find pleasant walks. If you proceed southward, through meadows and green fields, for about two miles, you will observe another spring bubbling up from the fertile ground, the Ferdinandsquelle. The vicarage of Pistan is inspected by many, as, from its high position, it affords a magnificent view of the sombre Bohemian forest.

Among the places of resort near Marienbad, must be reckoned the Jägerhaus, on the Schneiderang, near the zoological enclosure of Königswarth, where you can obtain a view of the Eger domains from the Luisenblick. The so-called "Judenkirchhof," a curious assemblage of stones in an opening of the forest, the monument of Waldstein, and on the Mühlberg, the Friedrichstein, and Schweizergang are pointed out. On the Hamelika mountain the Pavilion may be visited, and at its declivity, the valley of the Ferdinandsbrunnen, and Böttiger's Ruhe (rest). This frequented spa, so crowded during the height of the season that many must content themselves with very meagre accommodation as regards residence—was a wilderness little more than fifty years ago, only provided with a half-ruined wooden hut, in which two iron cauldrons were fixed for the preparation of Glauber's salt (sulphate of soda) out of the Kreuzbrunnen. A rough wooden enclosure of the spring, was the only other work of human hands that could be perceived. Not even a foot-path led to the source, which had to be reached by stepping over stones irregularly laid across the numerous bogs and marshy spots. Notwithstanding this difficulty of access, numerous persons visited the spring in summer, and found relief from their ailments by the use of the water, leaving marks of the benefit obtained by writing with chalk, pencil, or coal, on the wooden boards their names and diseases, with the quantities of water drunk, sometimes even the number of the evacuations was noted down for the edification of the curious. Through the solicitations and partly at the expense of the late Dr. Nehr, the bogs of the environs were drained, and the source secured.

At the beginning of this century a road was constructed to the little chateau of Hammerhof (three miles distant). Stagnant waters were led off, hills were dug out, ditches filled up, walks laid on, and, the demand from the frequency of visitors rapidly increasing, new houses and fine buildings made their appearance as promptly as such a limited locality would allow. Thus Dr. Nehr may be considered as the creator of Marienbad as a spa.

Its springs offer greater variety than those of the therma we just left. The foremost rank is occupied by the Kreuzbrunnen, bubbling up on the southern declivity of the steep Steinhau from half efflorescent porphyreous granite. A magnificent colonnade marks its entrance. Only 141 cubic feet of water are furnished in twenty-four hours; but the supply increases in a direct proportion to the quantity of water drawn, more than 300,000 bottles being annually exported. The water is very sparkling, clear, inodorous, and transparent, but exposed to the atmosphere it soon becomes turbid. The taste is acidulous and saline, somewhat bitter; the temperature $9\frac{1}{2}^{\circ}$ Reaumur ($53\frac{1}{4}^{\circ}$ Fahrenheit), specific gravity, 1.0094.

Its solid constituents amount to 66 grains in 16 ounces (thus a scruple more than Carlsbad), viz.:—

38.11 grs. of sulphate of soda (double the quantity in comparison with Carlsbad),

13.56 grs. of chloride of sodium (not quite double),

7.13 " carbonate of soda (less by nearly 3 grs.),

3.93 " carbonate of lime (more by one gr.),

2.71 " carbonate of magnesia (more by 1 gr.),

0.17 " carbonate of iron (only 1.100 of gr. in Carlsbad),

0.03 " carbonate of manganese,

0.11 " carbonate of lithia,

0.38 " silicx (two-tenths less),

Carbonic acid gas $8\frac{1}{2}$ cubic inches.

Opposite the Kreuzbrunnen, at the southern end, the Carolinenbrunnen is situated (formerly called Neubrunnen), in the centre of an old grove of alder and fir-trees. The source issues out of moor-ground, and is covered by a temple, the cupola resting on eight corinthian columns. Gas is constantly bubbling up from the opening. The water is sparkling and has an alkaline and ferruginous taste. Some smell of sulphuretted hydrogen is perceptible, but not demonstrable by analysis. Its carbonic acid being more firmly adherent, the oxide of iron remains for a longer period unprecipitated than is the case with the Kreuzbrunnen. Its solid ingredients are only $14\frac{1}{4}$ grains in 16 ounces, thus less than the fourth of the Kreuzbrunnen, viz.:—

2.79 grs. of sulphate of soda,

0.82 " chloride of sodium,

0.20 " carbonate of soda,

3.66 " carbonate of lime,

3.94 " carbonate of magnesia,

0.44 " carbonate of iron (nearly three times as much as the Kreuzbrunnen),

0.46 " silica,

0.38 " extractive substance,

Carbonic acid 15.43 cubic inches (nearly twice as much as Kreuzbrunnen).

Specific gravity 1.0031.

The Ambrosiusbrunnen takes its origin about seventy yards to the south of the Carolinenbrunnen, and has a more agreeable piquant taste. It contains only $10\frac{1}{2}$ grains of solid constituents in 16 ounces (the sixth of Kreuzbrunnen), viz.:—

1.86 grs. of sulphate of soda,

1.64 " chloride of sodium,

1.66 " carbonate of soda,

2.89 " carbonate of lime,

2.72 " carbonate of magnesia,

0.34 " carbonate of iron (twice as much as Kreuzbrunnen, but less than Carolinenbrunnen),

0.48 " silica.

Carbonic acid 12.9 cubic inches (less than Carolinenbrunnen).

Specific gravity 1.0023.

About 100 steps from the Ambrosiusbrunnen, the Marienbrunnen, or Badequelle, arises in the moor-ground. The abundant evolution of carbonic acid gas keeps up a constant hissing sound. The layer of gas spread over the surface of the water is highest before sunrise, lowest at noon, and then increases again towards the evening. It expands in rainy weather, and decreases when the sky is serene. In a very humid state of the atmosphere, the gas reaches as far as the upper boarding ($5\frac{1}{2}$ feet over the mirror of the water). The carbonic acid is firmly adherent, specific gravity 1.0007. It contains only $1\frac{3}{4}$ grains of solid constituents in 16 ounces, viz., about 1-3rd of a grain of sulphate of soda, 1-25th chloride of sodium, nearly $\frac{1}{2}$ carbonate

of lime, 3-100ths carbonate of iron, &c., and 9 cubic inches of carbonic acid.

After the Kreuzbrunnen, Ferdinandsbrunnen, as already mentioned, claims the highest remedial powers. It arises at about a mile off, in a meadow near the left shore of the Auschwitzbach, and it appears that at some remote period attempts were made for extracting salt out of this brunnen. When dug up, nearly efflorescent granite was found to compose the bed of the water, whilst bubbles of carbonic acid gas continually issued in great abundance. The supply amounts to 2,900 cubic feet in twenty-four hours. The water sparkles considerably when drawn, and holds the carbonic acid so firmly, that even boiled water will redden litmus paper. Its taste is piquant, and rather saline; specific gravity 1.0046. Its solid ingredients amount to 45 $\frac{3}{4}$ grains in 16 ounces (a scruple less than Kreuzbrunnen), viz.:

22.53 grs. of sulphate of soda	} less than Kreuzbrunnen.
8.99 " chloride of sodium	
6.13 " carbonate of soda	
4.01 " carbonate of lime	
3.04 " carbonate of magnesia	} more than Kreuzbrunnen.
0.39 " carbonate of iron	
0.09 " carbonate of manganese	

(less than Carolinen, and more than all the others).
Carbonate of lithia, 6-400ths.
0.66 silica.

Carbonic acid, 13 $\frac{3}{4}$ cubic inches (5 more than Kreuzbrunnen.)

Lastly, we have to visit the Waldquelle (forest source), at the west of the Kreuzbrunnen, which contains 22 grains of solid ingredients in 16 ounces (the third of Kreuzbrunnen), viz, 5 $\frac{3}{4}$ of sulphate of soda; 2 sulphate of potash (not possessed by another); 2 $\frac{1}{4}$ chloride of sodium; 6 carbonate of soda; 2 $\frac{1}{4}$ carbonate of lime; 2 9-10ths carbonate of magnesia; no iron; 1-10th carbonate of manganese; more than $\frac{1}{2}$ a grain of silica, and 18 $\frac{3}{4}$ cubic inches of carbonic acid gas. It supplies 37 cubic feet of water in 24 hours; Ambrosiusbrunnen, 75; Carolinenbrunnen, 405; Kreuzbrunnen, above 1,400; Ferdinandsbrunnen more than 2,800, and Marienbrunnen upwards of 5,200.

The temperature of all the springs ranges between 7° and 9 $\frac{1}{2}$ ° Reaumur (47° and 53° Fahrenheit). The Wiesenquelle, near the Ferdinandsbrunnen, is hardly ever employed. Another important healing agent is furnished by the layers of peat-moor found at a great depth behind the bathing-house of the Marienbrunnen. It consists of a brown, bituminous, unctuous mass, intermixed with decomposed vegetable fibre. Sulphate of soda, of lime, and magnesia, with chloride of sodium, oxide of iron, silica, and sand, form its chief constituents. The moor is now also brought to the place from the Stänkerhau. After merely removing the grosser admixture of sand and little stones, it is used for mud-baths.

The abundance of the carbonic acid flowing out of the soil in these vast strata of peat, led to the construction of gas-baths, employed either for the whole body, where the patient sits dressed in the gas-basin, with only his head in the ordinary atmosphere—the penetration of the gas to the epidermis is not obstructed in the slightest degree by the pervious clothes—or streams of gas are applied locally by elastic tubes, communicating with the gas-reservoir, and held to the mouth, ears, eyes, or otherwise affected parts of the body. Ordinary baths of the heated mineral waters are likewise used. Douche and rain-baths are also well contrived and frequently employed.

Marienbad owes its virtues chiefly to the sulphate of soda, and is indicated in plethora, and persons of luxurious habits. But why should simple purgatives not exercise similarly favourable results? For this reason: they certainly increase the peristaltic motion, and discharge offensive substances, but they also cause a greater quantity of serum to be excreted from the surface of the alimentary tube.

However useful and indispensable a purgative may prove in many instances, a course of purgatives would never be thought of as a remedy for producing beneficial alterative results. The case is quite different if we employ a remedy whose chief agent exerts a peculiar stimulating influence on the action of the liver, producing greenish, mucous, and fetid evacuations, with distinct evidence of a more than ordinary excretion of bilious matter, while copious serous purgation is avoided through the presence of silica and iron.

The lengthened contact of the dissolved ingredients with the intestinal fibres being thus brought about, the subordinated quantity of chloride of sodium finds time to exert its beneficial action on the nutrient organs, whilst the carbonate of soda and of lime assist in preventing the formation of too abundant an acidity in the circulating fluid, and thus improve the renal and hepatic action, the latter having been merely increased by the Glauber-salt. Muscular exercise always attending the course of the water, a

more active general circulation contributes likewise to counteract too great a stagnation of the portal circulation. Whilst Carlsbad acts, therefore, as a more powerful solvent, and as a more penetrating and lasting stimulant on the liver, skin, and kidneys, Marienbad is the more energetic and exclusive provocator of biliary excretion and of alvine secretions, and is applicable in cases of vascular erethism or local congestion, where the former would be fraught with danger.

From the above you will perceive that I strongly deprecate encouragement of excessive and continuous evacuations, and would advise discontinuance of the course, or decrease of the dose, if such should take place during the use of the water. On the other hand, non-increase of alvine action, or even obstruction, occasionally happening under the influence of Marienbad, should not be allowed to continue. Heating the water will increase its purgative action. Its employment in the form of clisters affords likewise powerful assistance. The separate springs exhibit different properties in relation to the difference of their composition. The Kreuzbrunnen stimulates to action all the abdominal organs, and, therefore, promotes the digestive function, and bilious excretion, whilst its carbonic acid increases the nervous tone. Dyspepsia and venous dyscrasia, with all their protean consequences, therefore, strongly indicate its employment; acidity, hypochondriasis, hysteria, enlargement of the liver, and morbid bification, all belong to this category. The Ferdinandsbrunnen, with a smaller quantity of sulphate and other salts of soda, and with a greater proportion of lime, magnesia, silica, and iron, naturally acts as a less solvent remedy, and is more indicated when the tone of the secreting organs is to be roused from great torpor, and when the uterine system is chiefly to be acted upon. It forms as it were, the transition from the highly solvent Kreuzbrunnen, to the purer tonic, the Carolinenbrunnen, which latter, by possessing nearly half a grain of iron in 16 ounces, with a very small quantity of solvent salts, displays its action more in the vascular system, increasing the tone and resisting power of the circulating fluid, and thus improving the general state of the nervous system; in fact it is indicated where steel and other tonics are required. Ambrosiusquelle, is somewhat inferior to the latter in efficacy, but quite analogous in its mode of action. The Marienquelle, with its abundance of gas, chiefly used for bathing, induces on entering the bath, a sensation of chilliness, which soon gives way to increased heat, and circulation over the whole epidermis, with subsequently improved nutrition. These baths are particularly useful in arthritic and rheumatico-paralytic affections, connected with hepatic and intestinal infarcta or torpor. The Waldquelle, the only spring which contains sulphate of potash, and no iron, with a very considerable amount of carbonic acid, is frequently drunk with warm milk or whey, in chronic pulmonary, and vesical catarrh, and in hysteric spasms and vomiting. The importance of potash and magnesia has been proved by the investigations of Liebig, who found that potash and chloride of potassium prevail in the liquid of the flesh, with magnesia as its predominant earth; whilst soda and chloride of sodium preponderate in the blood, with lime as the predominating earth. The gas and moor-baths are powerful supporters of the curative action of the springs, but they also exercise independent properties of their own, belonging to the inherent stimulus of carbonic acid on the peripheric nervous system, and of the moor on the plastic and glandular organs. The gas contains in 1,000 volumes, 74 nitrogen, and 26 of oxygen, the rest is carbonic acid; its temperature is rather lower than that of the atmosphere. The incident leading to the separate employment of the gas-baths, is too remarkable to be omitted. The same Dr. Struve, whom I mentioned in my first lecture, as the most successful imitator of the natural springs, and as the originator of the so called Brighton pump-room, experienced the result of the first trial in his own person. For many years his left leg was frequently the seat of violent pains, along the course of the ischiatic nerve, from the hip-joint downwards. The chief cause was congelation of such intensity, that the limb was only preserved with difficulty; he also partly ascribed the evil to the inhalation of hydrocyanic acid, during his chemical operations, which so often induces paralysis of the lower extremities. Torpidity of the lymphatic system was connected with these sufferings. The whole leg, particularly the tibial part, was covered with numerous hardened glands. The lymphatic vessels had the appearance of distended blood-vessels. Nutrition was also considerably impaired, the left leg being more than half an inch thinner than the right one. Every little exertion increased the pains, and could not be performed without exhaustion. At last he could not walk without a stick, and often required the arm of another person to support him. The portal system was likewise affected. A considerable swelling of the liver had been happily cured the year before (1817), but the left hepatic lobe was still distended. Under

these circumstances, he put his trust in the solvent constituents of the Kreuzbrunnen, on the animating power of the Marienbad, and on fomentations with warmed moor-earth. For ten days he had used these three remedial means without perceptible relief. He therefore resolved on making the first trial with the gas-bath. With difficulty and pain, and with the support of his servant, he was conducted over the small hills and declivities to the Marienbrunnen. The suffering leg, denuded only of the boot, was now exposed to the effervescing gas, covering the surface of the water. The introduction of a light indicated the exact height of the gas-layer, and its line of demarcation, by its extinction. The first sensation was chill. Soon, however, an agreeable warmth took its place, with a peculiar sensation, as of ants creeping along the larger nervous ramifications, and feeling very much like a mustard-poultice. After thirty minutes he withdrew the leg and supported it with a bandage. He began the way back with his habitual precaution and trust to support. "But," he says, "who could picture the sentiments of intense joy and gratitude that overpowered me when I discovered, by every new step, that renewed power had returned to the weakened leg, and that the uninterrupted gnawing pain had left it! With agility, and not inconsiderable exhibition of power, I walked unassisted through spaces which would have been a work of impossibility an hour ago." But these blessings of a risked attempt were not transitory; they still continued, a fortnight after the first trial. The daily repetition of the gas-bath produced invariably the sensations described. Dr. Struve continued these baths for three weeks more, in conjunction with the internal use of the Kreuzbrunnen and the local application of moor-earth. He then left the spa completely cured. Ever since, the gas-baths have been frequently employed. During the use of the mud-baths, Dr. Wetzler observed the skin to become momentarily contracted, and its susceptibility blunted. He had himself suffered from a disagreeable and sometimes painful sensation of the thighs, of rheumatic origin. Neither saline nor steel-baths could relieve the evil, which yielded after the first mud-bath. They are particularly recommended in erethic atony of the epidermis, in tendency to profuse perspiration, great susceptibility towards atmospheric changes, &c. Marienbad is INAPPLICABLE in real digestive weakness, in general atony, whether resulting from loss of blood or from exhausting diseases; in cerebral congestion, internal suppuration, hectic fever, inflammation of internal organs, carcinoma, atonic ulcers, scorbutic dyscrasia, &c. Carlsbad offers such important points of analogy and difference, that it becomes necessary to carefully discriminate between the two, in many given cases which may apparently belong to the sphere of action of both. First, we have to take the difference of temperature into consideration. The high temperature of Carlsbad at once excludes all patients of plethoric tendency, with vascular erethism, that may be benefited by the colder springs of Marienbad. Next we have to view the presence of a larger quantity of iron in the latter as a greater promoter of sanguineous plasticity and reproduction. The larger amount of liquefying sulphate of soda (nearly twice as much) renders Marienbad applicable in cases of abdominal plethora, with a sanguineous constitution, where we would have to avoid Carlsbad. On the other hand, the greater proportion of carbonate of soda and of lime, gives the latter more power in renal diseases, as lithiasis, &c., whilst its heat assists the action on the cutaneous system, counteracts disorders resulting from repelled exanthemata, from rheumatic and arthritic causes. Carlsbad being invariably useful whenever improved nutrition and circulation of the sero-fibrous or portal system is especially indicated, it stands unequalled in inveterate hepatic induration, gallstones, &c.; in fact, when a more thoroughly penetrating action is desired. But when abdominal secretion and excretion have to be chiefly promoted, when hepatic and alvine torpor have to be roused, Marienbad will find its appropriate employment. Though we are unable to determine whether its remarkable efficacy be due to a mere mechanical increase of peristaltic motion, or whether the sulphates, particularly of soda, tend to decarbonise the blood by yielding oxygen to its carbon for the formation of carbonic acid on the one hand, whereby the blood becomes partially arterialisied, and its circulating force stimulated, whilst sulphuretted hydrogen may be produced on the other, and exert a beneficial action on the ganglionic nervous plexus. For if, under the influence of vital heat, soda and sulphuric acid allow part of their oxygen to become absorbed by the carbon, we may expect that the newly-produced carbonic acid strives to enter into combination with part of the free sodium. This latter must therefore decompose the water of the gastric juice, and, attracting its oxygen to become carbonate of soda, it encourages the hydrogen to enter into combination with the portion of the deoxidised sulphur, and thus free sulphuretted hydrogen would be accounted for. If we do not generally observe the peculiar effects of sulphu-

retted hydrogen by the ordinary administration of sulphate of soda as a purgative, this is easily explained by rapid elimination of the remedy with the fecal impurities. But when a more lengthened contact with the gastric contents affords a greater opportunity for development of chemical attraction, and for interchange of substances according to stronger affinities, with chemico-vital modifications, such a result is highly probable.

You will remember, gentlemen, the cases of impetigo I mentioned, which were completely cured in the German Hospital, under the influence of sulphate of soda, without purgation; and really it would be quite impossible, in my opinion, to account otherwise for the beneficial effects of this remedy, which did not produce in the instances I have mentioned the slightest physical change in the patients, with the exception of the gradually vanishing eruption. The peculiar acrimonious substance, mingled with the organic fluids, and deposited by the *vis medicatrix nature* on the epidermis, may be catalytically removed out of our system through the sulphuretted hydrogen. The increased proportion of soda in the blood must also promote its liquidity and moving power, whereby renewal of the offensive animal substance, may, in some measure, be prevented.

Carlsbad containing nearly 2-100ths of a grain of iodine (0.017) owes part of its solvent power to this ingredient; for scrophulous complications do not contraindicate its use, but on the contrary, they are frequently combated by the spa. To sum up, you have to select Carlsbad, when the general vitality has to be roused, in persons not devoid of a certain amount of organic materials, which, however, are not properly provoked into their required function; whilst you have to give the preference to Marienbad, when general irritability and exercise of abnormal power has to be allayed, by concentrating a greater focus of action in the abdominal organs. In combating the alvine hyperactive condition, you will cause the systemic organism to be diminished, and the concord between the sensitive and irritable organic sphere to be restored.

Franzensbad.—Starting from Marienbad, at two A.M., the diligence arrives after four hours at Franzensbad, latitude above 50°, longitude 12°, which you see here situated on the North-west, at a distance of twenty miles, 1,500 feet over the level of the sea. The most remarkable place you pass, on your road, is the town of Eger, on the right shore of the Eger river, one league to the south of the spa. The whole district is called the Egerland, forming the north-western part of Bohemia, near the Bavarian and Saxon boundary. In the town-house of Eger, which is replete with antiquarian curiosities, the halberd is shown, with which the celebrated Wallenstein was pierced, in 1634, and who forms the subject of the beautiful drama by the great German author, Schiller. In speaking of these regions, Goethe says:—"If Bohemia be considered as a large valley, relieved of its waters at Aussig, on the Elbe, the district of Eger may be imagined as a smaller one, which discharges its waters into the river of its own name." This spot, impacted as it were in an obtuse mountainous angle, the Fichtelgebirg forming the corner, with the Erzgebirg as its superior, and the Bohemian Forest as its inferior branch. Baireuth lies forty miles distant to the west; Hof, thirty to the north-west; and Carlsbad, the same distance to the north-east. The encircling mountains consist of primary rocks, with the exception of the easterly Kulmerberg, which is composed of sandstone and slate clay. The plain exhibits the character of alluvial land. If you wish to retain the respective position and altitude of the important Bohemian triangle, you have merely to seek the origin of the Eger river (at the foot of the Schneeberg, the highest peak of the Fichtel-mountains, below 50° latitude), and to pursue its easterly course. Having passed the town of Eger, it bends slightly northwards. After having performed about the third of its journey, it is seen moving forward a short distance above Carlsbad. Thus the latter spa must possess a minor height than Franzensbad, from which the river requires a gradual declivity for facilitating its course. The difference of altitude amounts to 400 feet. As regards Marienbad, a similar relation takes place. The same river Tepl originates in its neighbourhood, which approaches its termination at Carlsbad. The altitude of Marienbad must, therefore, be more considerable, and being amongst the three nearest the mountainous south, it exceeds its western angle by 400, and its northern by 800 feet. The Eger, which we have left near Carlsbad, proceeds towards the north-east, leaving Püllna and Seidlitz in the north, and Saidschutz in the south. Above Seidlitz you perceive Bilin, and above this, the most northern, Teplitz, which enjoys rather more than half the altitude of Carlsbad, being situated near the termination of the Erz mountain branch, that had commenced at Franzensbad. Afterwards the Eger falls into the Elbe, near Leitmeritz, between Dresden in the north and Prague in the south. In order to become perfectly familiarised with these topographical details, I would advise you to draw a

line from west to east, representing the Eger, then another from south to north, taking the indicated position of the Tepl; and lastly, a line marking the natural eastern boundary of these Bohemian spas, from Dresden to Prague. By putting, then, the names of the various spas in their described positions, an apparently labyrinthine crowd of highly important mineral springs, compressed into such a small compass, will become perfectly clear and distinct. As early as the seventeenth century, the town of Eger was visited by very high personages, on account of the neighbouring mineral sources. From Eger, a very friendly road, bordered with umbrageous trees, leads, after passing the village of Schlada, to the colony of Franzensbad. Passing through a very tastefully laid out park-like walk, you perceive the Franzensquelle at your left, with its temple-shaped inclosure, and the contiguous colonnade and Curhaus. On the right the Salzquelle (salt source) meets your eye, the newly-built packing-house, and the pavilion, with the gas-baths. You are now in the so-called Kaiserstrasse, adorned on both sides with chestnut trees, and containing the best habitations of the place. A small park forms the end of the street. The Kammerbühl mountain, a short distance from Eger, with the characters of a former volcano, will afford the visitors a beautiful perspective of the environs. Walks to the neighbouring villages of Unter and Ober-Iohna, Oberndorf, Langenbrunn, &c., furnish ample opportunities for pedestrian exercise.

The most renowned of the springs, the Franzensbrunnen, yields 275 cubic inches of water per minute. Its temperature is 94° Reaumur ($52\frac{1}{2}^{\circ}$ Fahrenheit); its specific gravity 1.0058. Small gas bubbles constantly rise, and cause an undulating motion of the water, which is clear and transparent, even for a long time after exposure to the atmosphere.

This shows a very intrinsic combination of its constituents. It exhibits a refreshing, piquant, and acidulous taste, with some *après-gout* of iron. The surface of the water is constantly covered with a considerable layer of carbonic acid gas. The brunnen contains 42 1-fifth gr. of solid ingredients in 16 ounces (thus one scruple less than Kreuzbrunnen of Marienbad, viz.:-

24.50	grs. of sulphate of soda (14 gr. less than Marienbad),
9.23	„ chloride of sodium (4 gr. less),
5.18	„ carbonate of soda (2 gr. less),
0.67	„ carbonate of magnesia (2 gr. less),
1.80	„ carbonate of lime (2 gr. less),
0.23	„ carbonate of iron ($\frac{1}{4}$ of a gr. 6-100 more)
0.47	„ silex (one-tenth more).

Besides 2-100 phosphate of lime, 1-100 phosphate of alumina, 3-100 carbonate of lithia, 4-100 carbonate of manganese, 3-1000 carbonate of strontia; 40 cubic inches of carbonic acid (five times as much as Kreuzbrunnen), with a distinctly perceptible odour of sulphuretted hydrogen gas. The Louisenquelle originates in a north-westerly direction from the latter, on a moor-meadow, and is, properly speaking, a combination of several confluent springs. It has a minor depth than the Franzensquelle; its temperature is 94° Reaumur; its specific gravity 1.0057. Constant motion from the turbulent gas bubbles is likewise observed here. The water appears rather more turbid in the basin; but when drawn, it is clear, transparent, and sparkling. Exposed to the atmosphere, it resists decomposition even a longer period than the above-mentioned spring. Its chief employment being external, for common baths and mud-baths, I shall content myself with stating as regards its analysis, that it contains 7 grains less in 16 ounces than the Franzensbrunnen (viz., $35\frac{3}{4}$), the various ingredients observing analogous proportions, with the only exception of iron, which it possesses to a greater amount (0.23). Its carbonic acid is likewise less by 8 cubic inches (viz., 32). A few steps to the north of the Louisenquelle will bring you to the "Kalte Sprudel" (cold bubbler), so called in contradistinction to the hot Sprudel of Carlsbad, whose heat occupies three-fourths of the thermometric range between the ordinary freezing and boiling points. The constant evolution of gas causes such a violent hissing sound, that it has been invested with the name of Sprudel, rather inappropriately, in my opinion, for a distinct rising and falling of the water column cannot be observed. When drawn, the water is perfectly clear and transparent, and able to resist a long period the decomposing influence of the atmosphere. It exhibits a pricking acidulous taste, with a saltish *après-gout*—odour of sulphuretted hydrogen is strongly marked. The layer of gas covering the surface of the water sometimes reaches to the height of several feet. This spring is both used for drinking and bathing. It contains $44\frac{1}{2}$ grains of solid ingredients in 16 ounces; thus, 2 more than the Franzensquelle. It possesses 2 gr. more of sulphate of soda, $\frac{1}{2}$ a gr. less of chloride of sodium, 2 gr. more of carbonate of soda, 3-100 less of iron, and 1 cubic inch less of carbonic acid; in all other respects the two are similarly constituted.

The Salzquelle (salt spring), to the east of Franzensbrunnen, exhibits a gently alkaline taste, without any astringency. It contains 4 grs. less of solid ingredients than the Franzensquelle ($38\frac{1}{4}$ grs.), 3 less of sulphate of soda, $\frac{1}{2}$ gr. less of chloride of sodium, 2 less of carbonate of soda, rather less carbonate of lime, and only 7-100 of carb. of iron; carbonic acid only $26\frac{3}{4}$ cubic inches (14 cubic inches less). The Wiesenquelle, to the south-east of the Salzquelle, contains $46\frac{1}{2}$ gr. of solid ingredients in 16 ounces (but only 4-100 of iron). The Gasquelle (gas source), formerly known under the denomination of Polterbrunnen, evolves pure carbonic acid gas in great abundance, with one per cent. of hydrothionic acid, and is employed for douches, local, and general baths. The strata of moor occupy a great extent round Franzensbad. Within the moor-ground, blackish-brown mud is found impacted in the neighbourhood of the springs, of a fine, soft, and unctuous consistence. If moistened, it spreads a sulphurous odour. The moor is carefully cleaned through a sieve, and then mixed with the water of the Luisenquelle, either for local application or for general baths.*

You find in the springs nearly the same constituents as in Kreuzbrunnen of Marienbad; but the inferior amount of Glaubersalt induces a less lowering and antiplastic action; the diminished proportion of chloride of sodium a less solvent power; whilst its greater proportion of iron, silica, and carbonic acid, stamps it as a highly-valuable, gently-stimulating tonic, displaying its chief sphere of action on the ganglionic nervous system. The happy combination of ingredients promises us increased alvine peristaltic motion, improved biliary and renal excretion, restoration of stagnant or otherwise abnormal portal circulation, without the weakening and exhausting secondary results we might have to fear in some instances, from the fully-developed effects of an energetic course of the sulphates of Marienbad, or of the thermal watery impregnations of Carlsbad. On the other hand, we must consider that the very large amount of carbonic acid which accompanies the curative ingredients here, imparts to them a more potential efficacy, relying for the production of the critical changes more on the roused vital forces, than on the chemical changes resulting from the penetration of the more highly charged Marienbad, or the heated and more violently acting Carlsbad-water. This must not be considered as depreciating the two latter. On the contrary, the exact knowledge of the primary and secondary effects of each, will enable us better to select in various morbid modifications. Franzensbad acts specifically in similar diseases, as Marienbad; the whole distinction merely refers to the individuality of the respective patients. If, for instance, you have a torpid, bloated up, icteric European, who had been subjected to lengthened attacks of intermittent fever, in a tropical climate, and now remains tormented by hepatic or splenic physconia, with all signs of abdominal inaction, and without decided inflammatory or congestive symptoms, Carlsbad is alone able to bring about a happy result. But suppose a florid muscular person, of middle age, suffers from indigestion, hepatic engorgement, inaction of the bowels, hæmorrhoidal molimina, or from any of the numerous evils due to luxurious and sedentary living without corresponding muscular exercise, Marienbad will be unsurpassed by any other spa. A third individual presents himself to you, with similar hypochondriacal derangement, but he neither suffers from sequelæ of intermittent fever, nor does he seem to possess a large amount of organic materials of resistance; he probably owes his intestinal derangement to an excessive pursuit of study or business, or to overburdening mental depression; his temper is irritable, his cares and fears constantly surround him, he feels often chilly, particularly at his hands and feet, want of animation being stamped on his whole appearance; well, for him you have to choose Franzensbad as the most appropriate spring. Of course the many varieties of adjuvants in the three spas, must not be left out of our consideration, but the respective chief efficacy of each will be most strikingly unfolded in the described individualities. Franzensbrunnen has the special property of improving digestion, and increasing the appetite in a high degree. Acidity, mucosity, and biliary obstruction are powerfully counteracted, arterial circulation is heightened, hæmorrhoidal and menstrual flux are promoted if deficient, atony of the nervous system is raised; hæmorrhages of the rectum,

* 1,000 parts of dried moor contain 112 parts soluble in water, viz., sulphate of soda 48, of magnesia $\frac{1}{2}$, of lime $4\frac{1}{2}$, of strontia 1-10, of alumina $4\frac{1}{2}$, of iron $24\frac{1}{2}$, of manganese 8-100, chloride of sodium 10, silex $1\frac{1}{2}$, (soluble through combination with humic acid, or merely present in the solution as a mechanical admixture), gummy substance 2-10, humic acid, extractive substance 20, tannin, fixed hydrate water 4; 37 parts soluble in alcohol, viz., resinous ulmine or humus: 252 parts, some in combination with humic acid, soluble in muriatic acid, magnesia 14, sulphate of lime $10\frac{1}{2}$, phosphate of iron $3\frac{1}{2}$, alumina $29\frac{1}{2}$, proto-carbonate of iron $88\frac{1}{2}$, protoxide of manganese $\frac{1}{2}$, silica with carbon $42\frac{1}{2}$, and vegetable substances 26; 123 parts soluble in ammonia, viz., ulmine or humic acid; and lastly, 525 insoluble parts, viz., gross sand $50\frac{1}{2}$, and undecomposed vegetable substances 4.23.

bladder, and vagina, likewise frequently yield to the water. Pale, cachectic and exsanguine individuals, feel particularly great benefit. Uterine debility, functional anomalies, as dysmenorrhœa, sterility, inclination to abortus, are often cured here. The spa is frequently employed after very solvent and weakening courses, as an after cure, with great benefit. In fact it holds a high and undisputed rank in such diseases and conditions in which a pure chalybeate would be indicated, if abdominal venosity and hyperæmia did not require a special remedial complex action. The spa is injurious in plethora, inflammatory diathesis, or inflammation of internal organs, congestion to the brain, or other vital viscera, diseases of the heart, induration or suppuration of internal organs; generally speaking, excitable, sanguineous and cretic constitutions, are less benefited here than the chlorotic, lax, phlegmatic and torpid.

The Salzquelle varies in some respects from the Franzensbrunnen, being less stimulating (through the smaller proportion of iron). Its action on the urinary secretion and excretion, is particularly marked; it greatly diminishes increased systemic sensibility and irritability. The Kalte Sprudel, containing more sulphate and carbonate of soda than the above springs, excels in the promotion of all abdominal secretions and excretions, and ought to be employed in preference whenever a more penetrating and solvent action is required; but no vascular orgasm must be present. In many instances, before drinking, a part of the carbonic acid is allowed to diffuse itself, so as not to cause too powerful a stimulation. If the spa be employed as an after-cure, the Salzquelle, as the least exciting, is used first, then succeeded by the Kalte Sprudel, and the course closed with the Franzensquelle. The internal use of the water is powerfully assisted by the baths. The great utility of the gas and moor in many forms of local and general application, has already been mentioned. The constitution of the latter informs you of its highly solvent and tonic properties, wherein it excels that of Marienbad. The sensation caused by a moor-bath is, in my opinion, the most pleasurable that can possibly be excited by any bath. The warm, unctuous, elastic medium, gives support, and yields at the same time to our moving limbs. However forbidding the black broth may look, if you are once seated in the baignoire, the agreeably titillating effect exercised by the semi-liquid mass on the peripheric nervous ends, is indescribably pleasant, and you leave it with regret, abridging the luxurious immersion by being warned of the danger connected with a too great prolongation. The stay is gradually increased from a quarter of an hour to an hour. A warm-water bath stands near the other in the same room, and serves to relieve you of the adherent black mass. If you inspect yourselves in the looking-glass after leaving the moor-bath, you may well be frightened by the altered being you behold. After immersion in the water-bath, you observe the skin to have become wrinkled and loosened as it were, just as if it had become too wide a covering for the body. Increase of appetite may be reckoned upon, as an invariable follower of the moor-bath. How useful these baths must be in excessive perspiration through cutaneous atony, in repelled eruptions, in arthritic and rheumatic disorders, &c., is too obvious to require further allusion. After Carlsbad Franzensbrunnen has been used since many years. The curative process instituted there is here energetically continued. The atony of some assimilative organ, produced by the long use of the hot Carlsbad-water, is raised on the one hand, whilst on the other hand, the medical effect of analogous ingredients is proceeded with. It is desirable, even in cases of completed cure, at least after very inveterate and chronic diseases, that the patient should not expose himself to all his former injurious influences by an immediate return home, but that he should rather pass some weeks at Franzensbad, strengthening his health, to guard it against possible relapse. Though the intrinsic adherence of carbonic acid peculiarly fits the Franzensbad springs for exportation (which annually increases all over the continent), they are more rarely to be met with in this country, whilst many indications must be furnished for their employment. The imported water acts more as a solvent (by the partial precipitation of iron) than as a tonic, and is, therefore, very useful in abdominal infarcta and portal obstruction. Where circumstances prevent patients from visiting Franzensbad as an after-cure, they might, with great advantage, drink the water at their homes, either pure, or with wine and sugar, according to the required efficacy. Hufeland speaks of Frederick the Great having been freed from a dangerous disease by the use of the Eger water (the former name of Franzensbrunnen), which he then continued annually for the preservation of his health. In 1822, this physician says, in his 'Journal of Practical Heilkunde,'—"Men of business or learning, who had been fixed to the writing-table the whole year, and had contracted dyspepsia, abdominal obstruction, hæmorrhoidal or arthritic tendency, were formerly in the habit, here in Berlin, to use the Franzensbrunnen for four

weeks, with a great deal of exercise in the free air, and relaxation from the usual mental exertion. By this annual course they delivered themselves of the accumulated morbid matter, and became strengthened for next year's labours. Thus, notwithstanding injurious influences, many were able to preserve their health to a very great age, and prevent the development of various diseases, by which they might otherwise have been afflicted."

The important class of pikropæge terminates with this mineral source, and at our next meeting I shall have to accompany you to the well-known beautiful Bavarian spa of Kissingen, which may be considered as the sovereign representative of the highly valuable saline springs next claiming our notice.

(To be continued.)

CORRESPONDENCE.

THE BILL OF THE NATIONAL INSTITUTE, AND THE LONDON AND EDINBURGH COLLEGES.

To the Editor of 'The Institute.'

SIR,—I have read with much pleasure in the last number of 'THE INSTITUTE,' the interesting and ably written letter addressed to you by a Fellow of the Royal College of Surgeons of Edinburgh, on the subject of "the Bill of the National Institute." It must be highly satisfactory to the General Practitioners of England, and more particularly to the members of the National Institute, who have been so zealously contending, for some years past for the adoption of a legislative measure for the improvement of the Medical Polity of Great Britain, to find, from the resolutions of the Royal College of Surgeons of Edinburgh, lately published in your Journal, as well as from the letter of your Scotch correspondent, how much their views and opinions are in accordance with those of their fellow-practitioners in Scotland.

Both parties seem to agree cordially in opinion with regard to the value to the public of the professional services of General Practitioners—to the propriety, nay, to the necessity of every legally qualified Medical Practitioner being thoroughly educated in all the branches of medicine, and of his being called upon, before being allowed to commence practice, to prove, by an efficient examination or examinations, before a competent Board of Examiners, that he is qualified to practise any or all the branches of the medical profession, with safety to the public. Both parties are at one, too, with regard to the expediency and propriety of every legally qualified Practitioner having it in his power to acquire a respectable *status* in his profession, by being allowed to connect himself with some respectable medical incorporation, in which he may find himself placed on a perfect footing of equality with all his fellow-members, and entitled, with them, to aspire to the highest honours of the body, unimpeded by the circumstance of his being engaged in the practice of any particular branch of the profession, or of all the branches as a General Practitioner. Such *status* the General Practitioners of England are, under present circumstances, prevented from enjoying, in consequence of the absurd prejudice entertained against them by the so-called pure physicians, and pure surgeons of the Royal Colleges of Physicians and of Surgeons of London.

Matters seem to be differently arranged in Scotland, where, it is understood, General Practitioners are entitled to become Fellows of the Medical Incorporations there, and to enjoy all the privileges of their fellow-members, without regard to the particular branch, or branches of medical practice, in which, from choice or circumstances they may be engaged.

The Medical Practitioners of Scotland, and the General Practitioners, at least, of England, seem equally to regret the failure of the attempt made in 1849, by the united exertions of the Special Committee of the House of Commons, under the able and zealous direction of its Chairman, and of the delegates of the various medical bodies of England, Ireland, and Scotland, to procure a legislative enactment for the improvement of the Medical Polity of Great Britain. The disappointment too, was the greater, because sanguine hopes were at one time entertained, that the arrangements of the Conference Committee had been so far amicably settled, with the unanimous consent of the delegates, that little room was left for doubt of a Bill being framed, with the consent of highly influential political men, which would have received the sanction of Parliament. These hopes were unfortunately frustrated, however, at the eleventh hour, in consequence, principally, if not entirely, as is stated in the letter of your Scotch correspondent, who seems well informed on the subject, by unfavourable decisions of the

Council of the Royal College of Surgeons of England, on matters submitted to them for consideration, by their delegates of the Conference Committee.

Under all the circumstances, it is not to be wondered at that the General Practitioners of England should now be engaged in an endeavour to improve, to a certain extent, the Medical Polity of England, and to obtain for themselves a higher *status* in their profession than they are at present allowed to enjoy, by attempting to procure the sanction of the Legislature to the formation of a Royal College of General Practitioners for England, by means of which the education of medical men might be improved, and their own *status* in the profession and in society raised. Nor should it be matter of surprise, that the Royal College of Surgeons of Edinburgh, so often defeated in their earnest and anxious endeavours to procure some general improvement in the Medical Polity of Great Britain, and to obtain redress of certain grievances of which they have long and loudly complained in vain, on the part of their Fellows and Licentiates, arising from the enjoyment of certain exclusive rights of practice in England by the Members and Fellows of the English Medical Incorporations and Colleges, to their detriment, should, under existing circumstances, and approving of the general principles of Mr. Wyld's proposed bill, be disposed to give their aid and assistance in forwarding the present views and intentions of the members of the National Institute.

It is most sincerely to be wished that the Legislature may at last be induced to give their serious attention to the evils which are inflicted upon the public, evils which, at the same time, affect unfavourably the character and reputation of medical men generally, by the absurd and disgraceful state of the Medical Polity of Great Britain, and that they will not delay taking of themselves some measures for the removal of these evils, without waiting any longer in the vain hope that medical bodies and medical men will come to be of one mind with regard to the nature of the measures that should be adopted. The Legislature are in possession of full information upon the subject, in the various reports of Committees of the House of Commons; and they should be strongly urged to discharge the very important duty they owe to the public of securing them against the destructive practice of ill-qualified Medical Practitioners, and of supporting the character and reputation, and increasing the usefulness of legally and efficiently qualified medical men.

Will you excuse me if, before concluding this already too long letter, I take the opportunity of expressing my satisfaction at finding that your Scotch correspondent has, in so distinct and authoritative a way, contradicted the unfounded statements and assertions lately published in the 'London Medical Gazette,' with regard to the proposed arrangements of the Conference Committee of 1849, for the examination and qualification of the General Practitioner; these have been so satisfactorily disposed of by your correspondent, that it is only left for me to express my wish that the writer of the article alluded to will, in justice to all parties, either acknowledge the erroneous nature of his statements and assertions, or produce some proof of their accuracy.

I am, Sir, your obedient servant,

A GENERAL PRACTITIONER.

March 10th, 1851.

To the Editor of 'The Institute.'

DEAR SIR,—Should the following suit your pages, you are at liberty to make what use of it you like.

Faithfully yours,

J. H. GRAMSHAW,

Gravesend, March 11, 1851.

In the summer of last year, Mrs. C. called on me with her son, a healthy-looking lad, aged 16, who had scarcely ever had any illness, and requested me to examine his leg, as she thought there was an abscess forming on it. There was a slightly-elevated, inflamed spot, as large as a sixpence, about an inch and a half below the epiphysis of the left tibia, on its outer side, which was painful to the touch, but did not interfere with his walking. Having come to the conclusion from my examination that it was as she supposed, I directed him to go home and take measures accordingly.

For a few days he used fomentations and poultices with aperient medicine, but no fluctuation was discernible, notwithstanding that the swelling and pain increased.

The pus, if pus there were, was evidently deeply seated, but as constitutional disturbance was on the increase, I made a deep crucial incision to the extent of a couple of inches each way, and

to my surprise the contents, which were partially evacuated, consisted entirely of coagulated blood; there was a good deal of bleeding also from the edges of the incision, but no fresh blood issued from the bottom of the wound. When examined with a probe the bone was found to be rough and disintegrated, and coagula were existing within its substance. I directed the continuance of poultices for a time, and the pain was much mitigated by the relief of the tension and by their continued warmth. Still the constitutional disturbance rather increased after a time than diminished, and the probe discovered more deep and extensive mischief going on in the bone, clots continued to come away and became more and more offensive.

In consultation with some medical friends, it was decided that removal of the leg was necessary, and having put him under the influence of chloroform, I amputated above the knee. He gradually, though slowly, recovered from that time—not so quickly as I have had other cases of amputation recover in which I have not used chloroform, but without any untoward symptoms—whether the length of time was at all increased, as I think I have seen it argued, by the use of the chloroform, I leave to those who have had more experience to decide.

On examining the bone, it was found that the same sort of coagula occupied nearly the whole of the head of the tibia, to within half an inch of the epiphysis; the knee joint and the remainder of the bone, commencing three and a half inches below the joint, appearing perfectly healthy. After maceration a cavity appeared, occupying almost the whole of the head of the bone, and an opening into it as large as a half-crown on the anterior surface.

What was the disease? Was it rupture of the coats of one of the interosseous arteries, caused by some forgotten blow or fall—for he could not recollect any such? The contents were certainly coagulated blood, and not a malignant growth; there was no containing sac; and for a little distance around the cavity, the same appeared amongst the cancelli of the bone. The leg was amputated six weeks after he first saw or felt anything the matter, and the extent of the mischief was such as I have described.

The poor lad remained well and hearty up to Christmas, when he took cold, and rapid phthisis following, he died late in February. Will that throw any light on the nature of the disease?

REVIEW.

On Functional Diseases of the Liver, associated with Uterine Derangement, embracing the consideration of Special Physiological and Pathological Relations hitherto unnoticed. By BUTLER LANE, M.D., M.R.C.S., &c. H. Renshaw. Pp. 32.

THE subject of this essay is of great interest, and although its bearings may have been tacitly recognised to some extent, yet they certainly have not heretofore been distinctly embodied or applied. In some respects we may differ from Dr. Lane's conclusions, yet we cannot but allow him credit for directing the attention of the profession to the matter in question, inasmuch as further and more extended research cannot fail to lead to results of high practical importance.

Dr. Lane assumes the existence of a physiological and pathological relation between the liver and the uterus, and in support of his view, he adduces in the first place, various anatomical and physiological facts; among others he furnishes a table, founded on the researches of the late Dr. John Reid, which shows that the weight of the female liver, both absolutely, and relatively to the weight of the entire body, is more liable to variation than that of the male; and that at the main period of menstruation, and child-bearing, the diminution of proportionate hepatic weight, on the side of the female, is most remarkable. He points out the fact, that in the majority of females, menstruation is attended by some alvine derangement, which he considers to be dependent on increase or diminution of biliary secretion, that being the natural stimulus to healthy purgative action. He says:—

"Assuming, therefore, the existence of an hepatico-uterine relation, it will follow that when the periodical excitement of the uterus takes place, the liver will manifest some sympathetic influence. If the action should be simply derivative, the biliary secretion will be diminished, and the natural catharsis will consequently be lessened. But if a greater degree of excitement attend the menstrual period, the liver may even be supposed to undergo a sympathetic degree of excitement, or crethism, and its secretion being thereby augmented, instead of being diminished, increased catharsis will consequently result."

Dr. Lane believes that constipation, to a greater or less extent,

is most commonly in immediate connection with menstruation; when the uterus is in a healthy condition, he states:—

"Of 100 females in good average health, 22 acknowledged no change in the action of the bowels during menstruation, though in many of them it is probable that there was some slight variation from the usual state, inasmuch as the answer returned to my inquiry was often, that the person had *not noticed*, or was *not aware* of any difference in the action of the bowels at those times; in forty-five instances, comparative constipation was declared to exist during menstruation, and in thirty-three cases, there was relaxation of the bowels, in comparison to the usual wont, but in about half these cases, there was more or less dysmenorrhœa, whereas in the females, otherwise categorised, the complaint rarely existed."

In a paper which was lately read at the Medical Society of London, by Dr. Tilt, "On Diarrhœa connected with Menstruation," he appears to accord with Dr. Lane, as to a comparative state of constipation being in *immediate* connection with menstruation, though he more specially points out that a relaxed state of the bowels is often antecedent, which is probably the case, but we require more extensive observation to elucidate the question.

Our author enters more fully into the pathological and practical part of his subject, assaying to define the mutual morbid relations of the liver and the uterus, and he thus classifies hepatic-uterine complaints:—

1. The action of the liver in excess. {
 - a. The secretive action of the uterus in excess.
 - b. Do. do. do. deficient.
2. The action of the liver deficient. {
 - a. The secretive action of the uterus deficient.
 - b. Do. do. do. in excess.

He then speaks of these compound morbid states individually, illustrating them by cases, and pointing out the appropriate method of treatment. The arrangement in question, certainly does not appear devoid of utility, but may probably tend to facilitate our appreciation of many obscure female complaints, and to enable us to follow up our remedial measures more systematically. In conclusion, we may say that this little essay is evidently the result of some reflection and research. It is earnestly written, and will not fail to draw the attention of its readers to the debatable subject of which its treats.

MEDICAL INTELLIGENCE.

MEDICAL SOCIETY OF LONDON.

March 1, 1851.

DR. BENNETT, President, in the Chair.

(Continued from page 194.)

CONGENITAL MALFORMATION OF THE BLADDER, ETC.

Mr. T. H. Wakley exhibited a patient named P—, an inmate of the Royal Free Hospital, the subject of monstrous or malformed genito-urinary organs. Previously to showing the case, he said the man had been sent to the hospital by Mr. Eaton, surgeon, of Grantham, Lincolnshire, in the hope that surgical assistance might afford the poor fellow some relief. He (Mr. T. Wakley) had carefully and repeatedly examined the parts, and, upon mature deliberation, considered that surgical interference was justifiable, and he had brought the patient there that evening with a view to elicit an opinion upon the subject from the fellows then present, as well as to show them so novel and distressing a case. He had heard that a malformed bladder had been operated upon successfully by a surgeon at Berlin, but the malformation in that case, as far as he could ascertain, was of a very different character; the arrest of development occurring in the mesial line just over the pubes, the surgeon had merely to bring the lips of the fissure together; but, in the case to be shown to the Society, there was no cavity to enclose. He had made every inquiry respecting the Berlin case, but could not obtain any satisfactory information; however, he believed it to be as he had stated, and that surgeons had not yet attempted any surgical alleviation in such cases. Many cases of the kind which had been met with in practice had been described, and the late Mr. Earle had devoted considerable attention to this class of malformations, with a view to their mechanical relief. Writers had not even discussed the merits of operative procedure in these cases, but it must be remembered that reparative surgery had been of late years making rapid strides, and was so successful in its results, that surgeons were certainly authorised to pause, even in so bad a case as the present, before they left the patient to the comparatively small amount of assistance which he received from instrumental means.

The man was then introduced. He appeared to be about twenty-five years of age. The parts having been uncovered,—

Mr. T. Wakley, in continuation said: The Society would observe that no umbilicus existed; the abdominal muscles were separated at their lower part, through which appeared the posterior wall of the bladder, with its muscular and mucous coats, forming a highly vascular tumour, very painful to the touch, and readily bleeding. The orifices of the ureters could be distinctly seen; the urine was constantly dribbling from them, and flowed over the rudimentary penis, producing very severe excoriation of the parts. The rudimentary sexual organ was about one inch in length, and closely applied to the inferior part of the tumour, which, when depressed, displayed complete epispadias, the urethra being merely a groove. The opening of the seminal ducts could be seen at the root of this rudimentary penis; upon each side is a prominence corresponding with the partially descended testes. The parts were partly covered with hair; indeed, every symptom of manhood existed, to the discomfort of the patient, sexual desire being as strong as if the parts were in a healthy state. Mr. T. Wakley, then (the patient himself being present, and standing close by him), read quotations from Mr. M'Whinnie's pamphlet, giving the description of the dissection of a malformation of the genito-urinary organs, which very nearly corresponded with that of the man then before the Society. He thought that that dissection strongly favoured the probability of the success of an operation. In the case exhibited, as far as it was possible to judge from external examination, the pubic symphysis was complete. The majority of writers state that in these malformations the pubic bones are widely separated, and only connected by ligamentous bands. In this case he certainly considered the pubic bones to be in apposition, and firmly united. The operation which he proposed to perform was by transplanting from the neighbouring integument of the abdomen a natural covering, to protect the painful and highly vascular urinary tumour. This he would attempt to accomplish in the following manner:—Two flaps of skin to be dissected up from the integument in immediate contact with the lateral edges of the tumour, leaving a broad root still attached to the skin immediately over it. These portions of skin should then be twisted over an expanding silver shield, modelled so as to cover the tumour without pressing upon it. This instrument would be useful, first, in preventing adhesions between the posterior wall of the bladder and the transplanted skin; secondly, in protecting the latter from contact with the poisonous urine; thirdly, in allowing the lateral edges of skin to be brought together by sutures over the plate. Of course every attempt should be made to favour union both in the middle line, and also at the lateral edges of the tumour, from above downwards; and, as union progressed, the silver shield would be lowered and diminished in size, until only an opening should be left for the passage of the urine at the root of the newly-formed bladder; incontinence of urine would then be the only discomfort to the patient. He said the operation would of course be performed by degrees, and many difficulties must be encountered. The enemy to the successful issue of the operation would be the urine; but he thought, the silver shield would combat that evil. On Monday the man would proceed home, and make arrangements for his return to the hospital, as he was most anxious an operation should be attempted. Mr. T. Wakley, in conclusion, called attention to the apparatus which had been constructed to catch the dribbling urine, and protect the parts from injury. The instrument was a modification of that invented by the late Mr. Earle, the difference being, instead of an oval plate, held in its place by hernial springs, a zinc plate, accurately fitted to the man's body around the malformed parts, especially in the perineal portion, thus requiring only a broad waistband to retain it in its place. A galvanised India-rubber tube passes from the most dependent part of the zinc plate to the ancle, according to Mr. M'Whinnie's method. For the manufacture of the apparatus, the cast on the table had been made, the zinc plate being worked on the cast. He trusted that he should at some future day, not very far distant, again introduce the patient to the notice of the Society, when the result of the operation would be seen, whether successful or otherwise.

The general impression among the fellows seemed to be, that no surgical operation ought to be attempted.

THE NEW SUPERPHOSPHATE OF IRON.

Dr. Routh stated, in reference to the new preparation of iron he had brought before the Society on a former occasion, that it had been analysed, and found to be a new salt—a superphosphate of iron dissolved in an excess of phosphoric acid. It was quite free from any ferruginous flavour, and was, indeed, exceedingly pleasant to take, so that it was very well adapted for children.

As he had said before, he believed it to be more speedy in its operation than many other preparations of iron. It was now prepared in the form of a syrup by Mr. Greenish, of 20, New-street, Dorset-square; it is much cheaper than that of the iodide of zinc. He could strongly recommend it to the profession.

SPONTANEOUS COLLAPSE OF THE WALLS OF THE ANTRUM.

A paper by Mr. White Cooper was read (and illustrated by a portrait and cast) of a case of spontaneous collapse of the walls of the antrum. The patient was a respectable young Irish woman, of healthy constitution and strong frame, who, nine years ago, perceived a dusky mark beneath the left eye; after a time this extended down by the side of the nose, and was followed by a sinking of the cheek in that situation; there was, however, neither pain nor uneasiness. After this had existed nearly seven years, gradually increasing in extent, she applied to Mr. Cooper on account of the tears flowing over the cheek. Palliative measures were adopted, and this unpleasant symptom speedily subsided. This was early in 1849, and since that time the sinking of the anterior wall of the antrum has steadily continued to increase; it has now given rise to considerable deformity, the appearance closely resembling that which would have arisen had a large portion of the superior maxillary bone been removed, and the integument sunk. The teeth on the affected side were in a most unhealthy state, and two were removed in 1849, in the hope that the morbid action might be arrested; but such has not been the case. Mr. Cooper has not been able to find a similar case related in any work.

Mr. Chippendale could not understand the reason why the teeth had been extracted, as the antrum was sunk, and not swollen, and consequently there were not any grounds for suspecting the collection of matter in the cavity.

Mr. White Cooper, in answer to Mr. Chippendale's remark, and to questions put by other members, said, that before the teeth were extracted, he had talked the matter over with Mr. Alfred Canton, and, as the teeth were very much decayed, their removal was decided on, as it was thought the collapse of the antrum might be caused by the irritation they set up. There was not, he believed, any syphilitic taint in the system. The bone anteriorly did not feel softer than usual, nor could he perceive that it was at all deficient. It merely felt as if it were sunk deeper than it should be from the surface. The woman had not been the subject of any external injury, nor could he trace any cause that could account for the change. He did not either regard the case as one of mollities ossium, nor could the blue appearance be attributed to melanosis. The woman was not a likely subject for that disease. She was a strong, healthy-looking woman.

Mr. Nunn had a friend, whose face presented a similar want of symmetry in the features, and much resembled the cast, with the exception of the lividity of the countenance, which was not present.

Mr. E. Canton thought that an explanation of the means whereby retrocession of the anterior wall of the antrum might be produced would be found in the case of a tumour which had originated in the sinus, and during its growth became attached to the posterior surface of its front boundary; the supervention of a gradual, spontaneous cure of this tumour would be accompanied, under such circumstances, with traction made upon the anterior wall, by reason of its connexion to that part, as the tumour was by degrees undergoing absorption. Mr. Cooper's patient had never observed any undue fullness of the left cheek previous to the "falling in" of the part; and if Mr. Canton's view of the case were correct, it is probable that the intra-maxillary growth had not gained sufficient size before its removal began to produce deformity. The disease of the teeth on the left side only of the upper jaw, seemed to show that the pressure exercised by this supposed tumour had interfered with the nerves running in the substance of the wall of the antrum to supply these organs, and their decay had been the inevitable result; for, on the other hand, the teeth of the upper and under jaw, as a very general rule, are found to decay symmetrically under the ordinary circumstances which induce their caries.

Mr. Chippendale remarked, that if the foramen between the antrum and the nasal fossa were closed, a falling in of the antrum might occur from the pressure of the external air, that in the cavity itself being previously absorbed. He had put the question about the extraction of the teeth, because there is a great rage for removing teeth in disease of the antrum, although it is quite unnecessary to do so, as the opening as practised by Liston, was larger, quite as depending, and was more convenient and available, and could be employed without a necessity for extracting sound teeth.

Mr. White Cooper's own impression was, that if the orifice were so blocked up, there would be an accumulation of matter, which would produce rather the opposite condition—an enlargement of the antrum.

Mr. Chippendale replied, that that was not the case with the tympanum, when the Eustachian tube was closed.

Mr. Pilcher seemed to think the apparent collapse an exaggerated malformation. A depression on the left side of the face is not an uncommon occurrence, as is well known to artists, although it does not obtain to such an extent as in the case before the Society. He thought it might be an original malformation, greatly increased during the progress of development.

Mr. White Cooper observed, that according to the patient's own account, her face was perfectly symmetrical until about seven years ago, when the lividity commenced, and the deformity has since steadily increased.

Mr. Pilcher then mentioned a remarkable case, that of a boy, who had a tumour, which he thought was a nevus of the mucous membrane of the antrum, passing through an aperture in the anterior wall. It disappeared on pressure, when the aperture could be felt, and returned when the pressure was removed. He thought that if this tumour were to undergo a spontaneous cure, the imperfect bone might collapse, and thus present a resemblance to Mr. Cooper's case. His patient did not suffer from pain.

Mr. Alfred Canton said that, if he recollected the case right, the teeth were much decayed, particularly the first permanent molar, which is immediately beneath the antrum. Although he agreed with Mr. Chippendale in the importance he attached to the preservation of sound teeth under such circumstances, he could not admit the necessity for their non-removal in this case, seeing how much they were greatly decayed, and the possibility that they were in some way connected with the change that was going on, in which case their extraction might tend to arrest its progress. There was a drawing in of the lower eyelid, owing, he thought, to the collapse. It was worthy of notice that the teeth on the other side of the upper jaw were perfectly sound.

Mr. Nunn suggested that the nerve supplying the antrum and the teeth on that side might be diseased.

Mr. White Cooper had thought that that might be the case, but there were no means of verifying the opinion.

AMPUTATION OF THE ASTRAGALUS AND OS CALCIS.

Mr. T. H. Wakley proposed, at the meeting on the 15th inst., to exhibit the patient on whom he had performed this operation.

SUPPURATION OF THE HIP-JOINT.

Dr. Rogers described a case of inflammation of the right hip-joint, ending fatally. The little patient, a strumous, unhealthy-looking, emaciated child, suffered from intense pain in the joint; the leg was flexed and almost rigid, and she was very fearful of its being touched. The disease was of a few days' duration only. Leeches and blisters were used, but soon typhoid fever set in, and she died twenty-four hours after Dr. Rogers was called in. The examination of the joint showed that its cavity was filled with fresh, laudable pus, and had not any communication with any other part of the body. The case, he thought, was interesting, from the rapid progress made by the disease, and its fatal termination. One of the brothers of the deceased died from phthisis.

CARIES OF THE PETROUS PORTION OF THE TEMPORAL BONE.

Mr. Willing, of Hampstead, read the following particulars of a case of caries of the petrous portion of right temporal bone, implicating the spinous process of sphenoid, and part of the basilar portion of occipital bone, with complete disorganisation of the vessels and nerves, passing through the foramina in those bones.

Mary Ann Dimock, aged 11 months, the youngest of three children, the family very poor, and the mother, during her pregnancy, sometimes unable to obtain the common necessities of life, as her husband was out of employ for many months; the other children healthy. This child was brought up by hand, as the mother had no milk: it was very small, and atrophied from its birth; never had any symptoms of teething, but was always restless and throwing its head about, and had its fingers in the mouth constantly, night and day, so that the nails of the index and middle fingers were destroyed; ate its food ravenously, but never gained flesh; in fact, was very little larger at its death than at its birth; had had a discharge from the right ear from its birth, which continued to increase up to the death. About four months since the left side of the face became paralysed, and drawn somewhat to one side. About a week previous to death, the palsy became more marked. The child always suffered from diarrhoea. When first seen by him in June, it was three months old; the discharge then was slight, but there was a good deal of pain on

pressing the mastoid process; the external ear and meatus were slightly inflamed and swollen. The little patient had cod liver oil to improve the general health, with small doses of the hydrarg. c. cret. and Dover's powder, to arrest the diarrhoea; the ear to be syringed gently with warm water, and kept clean; with counter-irritation with the acct. cantharidis behind the ear. Under this treatment the child improved; but, after a little time, the discharge became profuse, and the pain on pressure increased. The external ear was highly inflamed, and there was the constant discharge of horribly offensive pus, mixed with blood. On pressing the mastoid process at this time, it offered no resistance, and the structures behind and under the ear were evidently disorganised, thus indicating that extensive caries of the temporal bone was going on. The lymphatic glands, also, were very large. Dr. Jenner prescribed for the child a few months before it died, but slightly modifying the treatment previously pursued. At last nothing but sedatives were given, as the disease was evidently past relief. The little patient remained sensible till within twelve hours of its decease. It died in convulsions.

Post-mortem examination, thirty-two hours after death. The anterior fontanelle very large; the calvarium strongly adherent to the dura mater, which was partially destroyed in removing the bones. The dura mater was very thin, not thicker than tissue paper. The convex surface of the brain was intensely congested, with large patches of dark coagulated blood scattered over the surfaces of both hemispheres, but principally on the right side; in some places, it extended for three or four lines into the substance of the brain. At the posterior part of the middle lobe of right side, was a small abscess, about the size of a pea, extending about three lines into the substance of the brain. The arteria cerebialis media appeared as if injected with wax on both sides, principally on the right side: the rest of the arteries seemed normal. The cerebral veins were distended with coagula. The ventricles contained about three ounces of reddish turbid fluid. The base of the brain was not at all congested; there were about four ounces of fluid, the convolutions lying on the petrous portion of right temporal, i.e., the diseased bone, were much softened. The dura mater, covering the diseased bone, was disorganised, and thickened to the extent of a line, and separated by pus. On removing it, the appearances as indicated by the title of the case, were discovered.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 25, 1851.

DR. ADDISON, President, in the chair.

CASES OF SMALL-POX AFTER VACCINATION.

(Continued from page 192.)

Dr. Mayo remarked that the observation of Chomel, quoted in the last paper, that "we cannot fairly expect more from vaccination than from the small-pox itself," was of great importance. He then referred to a visitation of epidemic small-pox that had occurred many years ago in Edinburgh, in which it was stated that there had been more cases of confluent small-pox and of death, in persons after inoculation, than after vaccination. The difference was greatly in favour of vaccination. He did not think the value of vaccination was at all affected by the occurrence of small-pox in persons who had been subjected to it. Re-vaccination was a very important question. What does it effect? If it produces the full effect, are we to suppose that vaccination affords freedom from the disease for a certain time only, or is it a proof that the person thus re-vaccinated is one of those in whom vaccination is not protective? He (Dr. M.) thought this was an important point for consideration. He had seen three cases at the Middlesex Hospital, under the care of Dr. F. Hawkins, which were admitted into the hospital as measles, and were so considered by the apothecary, but which ultimately proved to be secondary small-pox, and he believed that if the cases of second attacks of measles were carefully examined, many of them would prove not to be that disease.

Dr. Gregory had listened to the papers that had been read with the greatest satisfaction. There was much in them worthy of the Society's consideration. The first case was that of a person, who had small-pox in advanced life, after vaccination, the disease proving fatal; but this occurred in India, where the intense heat, with other circumstances, rendered that disease peculiarly inimical to life. But the singular fact connected with this case was, that he was said to have had small-pox in the third year after vaccination. It was not mentioned, however, whether in that attack he was under the care of a medical man, and he (Dr. Gregory) would ask Dr. Webster to state whether the disease

had been pronounced to be variola by a medical practitioner, for he himself had never seen such a case, and asked, therefore, for information. The next case was one of confluent small-pox after vaccination. There was nothing very remarkable, in it except that re-vaccination had been practised, and followed by considerable inflammation. This served to show the very small importance attachable to re-vaccination—an opinion he (Dr. G.) had long held. The remark of Chomel, that we have no right to expect more from vaccination than we get from small-pox, was very important, and would attract the notice of the profession. He (Dr. G.) held that the doctrine was highly untenable. What do we expect from inoculation? We impart the disease, small-pox, submit the whole of the system to the influence of that subtle miasm—the variolous: it is taken kindly, the patient passes through it, and there it ends. There are, however, exceptions to all laws, and he may have the ill-luck to take small-pox afterwards. He did not believe that any person protected by inoculation had the smallest fear of small-pox. He might certainly be attacked, but the danger was very slight indeed. But the vaccinated do not banish their fear of it, nor can they, for the facts do not justify them. Up to puberty they may, for cases of small-pox after vaccination before puberty are very few in number, and the danger before that period is very slight; but it is very different afterwards. He who has not been inoculated, after his fifteenth year, is exposed to the chance of getting his first attack of small-pox, and, having taken that, he may in advanced life have it again. It is not fairly stated, to say that vaccination does not do more than inoculation. Inoculation gives the first attack of small-pox, and that is a preventive for the future; but vaccination protects only up to puberty, and after that leaves the person liable to the disease. Cases of modified small-pox were first spoken of in 1815, when those who were among the first vaccinated in childhood, attained puberty, became liable to it, and it afterwards continued to recur. At the present date cases of modified small-pox are continually admitted into the hospital, and the disease is sometimes very severe after vaccination. The mortality in cases of small-pox after vaccination is about five per cent.

Dr. Mayo remarked, that if his memory served him aright, at a time when a large number of persons had been inoculated, small-pox largely abounded afterwards among them, after that protection had been employed, which Dr. Gregory thought was so much to be relied upon. It occurred more severely among the inoculated than among the vaccinated, and more of the former died than of the latter.

Dr. Webster said that Dr. Gregory had questioned him as to the attendance of a medical man in his case in the early attack of variola. He himself had not attended the patient, but he knew the medical man who vaccinated the child, and had attended him professionally during his childhood. In India the patient was attended by the surgeon of the regiment, and there was no doubt about the case in his own mind. Dr. Gregory was quite right in stating that small-pox is more dangerous and fatal in India than in this country, and he (Dr. W.) believed that their president (Dr. Addison) could confirm this statement. The fact showed the great importance of persons going there being thoroughly protected previously. It was by no means his intention in his paper to depreciate the value of vaccination, but he thought that in many cases of secondary small-pox vaccination had not been properly performed. The reason why small-pox was still so fatal here, was because of the prejudices against, and the consequent neglect of, vaccination, even in London. At Nottingham, the mother of a child, in refusing vaccination, said she would not go against the will of Providence. Others, again, object because it is imparting to a human being the disease of a beast. At Bilston, during the last quarter, 69 persons died from small-pox, only 19 of whom had been vaccinated. In the eastern district of Wolverhampton, there were 56 deaths from small-pox without previous vaccination, and 15 after that operation had been done. At Coventry there were 65 deaths, only 8 of whom had been protected by vaccination. In Dudley, again, 60 persons lost their lives from variola, 50 of them not having been vaccinated previously. Small-pox was very prevalent in Staffordshire during that time. Again, in St. Giles' a woman lost a child by variola, and, on inquiry, it was found that all her twelve children were unprotected. While so many persons are still unvaccinated, no one can wonder that the exanthema should still prevail and be so fatal. The peculiar feature in the case he had described was that secondary small-pox had occurred in several members of the same family. It would seem that certain families cannot be protected from the disease. The young men only were attacked; they had a sister, but she escaped. Dr. Macintyre had given him the particulars of a similar case. There were two brothers vaccinated in childhood. One

went to India, where he got the disease, and died. The other in South America, who had been vaccinated and also inoculated, having heard of his brother's death, was re-vaccinated. Nevertheless, some time afterwards, he also was attacked with small-pox, and recovered with difficulty. His doctor said he would have died had he not been re-vaccinated. He (Dr. W.) would wish to ask Dr. Gregory why he thought vaccination a protection only up to the period of puberty, and whether he considered it advisable to re-vaccinate after that date?

Dr. Gregory would not say that the protection of vaccination absolutely ceased at the fifteenth year, but that before that age it was as complete as that of inoculation was through life. After that time a different law prevailed, but he (Dr. G.) was not able to say what that law was. He had been asked if re-vaccination renewed the protection of vaccination? He himself regarded it as a very slight matter, done more to satisfy the patient's mind than as a safeguard against disease; and as it is but a simple thing, there can be no objection to its being practised. The question is, what is the law after the fifteenth year has passed, when the constitution manifests a susceptibility to small-pox for the first time? We have no means at present of increasing the protective power of small-pox. Whether inoculation after the fifteenth year would or would not improve its protecting action, he was not able to say, the laws of this kingdom preventing his instituting any experiments to examine into its protective powers, by passing the variolous virus through the system after that age. In France, where another and a different law prevails, experiments have been instituted, which show that, when inoculation has been practised after puberty, vaccination having been previously employed, there results a papular eruption, unattended with constitutional symptoms, and in no way communicable from person to person. These facts have been stated by Cazenave and Schedel, and he himself had, by private experiments, confirmed their deductions; but as he had no wish to bring himself into collision with the legal authorities, he would not state when nor where he had made his inquiries. The law in Italy is the same as in England; the Austrian government refused to allow inoculation; and an Italian physician had recently petitioned for permission to carry out some experiments on the subject.

Dr. Copland explained that the reason why the vaccinated escaped so well in the epidemic mentioned by Dr. Mayo, was, that they were all under 15 years of age, and were still protected by vaccination. When he was first in practice in London, he attended a family at Hackney, nine in number. Some of the members were grown up, and others were still in childhood. All had been vaccinated in childhood, and the cicatrices were complete. Small-pox attacked them; in the two adult members, the disease was not at all modified; in those who were near the 14th or 15th year, it showed itself in a less complete form, while the youngest, then about 11 or 12 years of age, had only a papular eruption. He (Dr. Copland) had stated in 1822, from these and other facts, that vaccination was only a temporary protection, and its influence wore out, as life became more and more advanced. This had been fully verified, and he believed that in years to come, epidemic small-pox would not spare even the vaccinated. He then mentioned the case of a lady, whom he had seen with Dr. Gregory. She had been vaccinated twenty years previously, but had small-pox as confluent as ever it was met with in the negro-race, among whom it is always very violent. He thought that by and by, vaccination would not be considered a protection at all after puberty.

Dr. Basham observed, that no one had alluded to the distinction between perfect and imperfect vaccination. The latter occurred very frequently, and was the cause, he believed, of the prevalence of secondary small-pox, or rather, of the want of protection by vaccination. He himself had casually examined a number of poor patients, and of these, only four presented a perfect cicatrix: the scars in the other cases were such as no one would think indicative of protection.

Dr. Snow had seen modified small-pox in children under fifteen years of age after vaccination, and in one instance in a child only three years old. He could not tell on what Dr. Gregory founded his opinion, that vaccination did not protect after puberty, but he thought it was incorrect. Children suffering from modified small-pox are treated at home, and not sent to hospitals, but the adults are, so that if Dr. Gregory's opinion were drawn from the hospital statistics, it might, perhaps, not be correct. Modified small-pox is not often met with at thirty-five or forty years of age. The great body of medical men were vaccinated, he thought, and not inoculated; these, he thought, were brought more in contact with small-pox cases than other persons, and yet they were rarely attacked.

Dr. Webster, to show the mortality of small-pox in persons

unprotected by vaccination, said that 100 years ago one-tenth of the total mortality was from variola. After inoculation was practised, 1 in 14 of the total deaths was from small-pox, and during the last ten years only 1 in 85, or only one-sixth of the previous ratio. Formerly variola was the most fatal of all diseases. Thus, in 1749, in a total mortality of 25,516 in London, 2,625 died from variola. Small-pox is now the fifteenth disease as to fatality. It now proves fatal principally in the unvaccinated. Dr. Thomson says, of 71 cases of variola after vaccination, only three died; whereas in 205 cases of primary variola, 50 died, or 1 in 4.

Dr. Gregory, in replying to Dr. Basham, observed that cicatrices could not be regarded as satisfactory proofs of perfect vaccination. In fact, but few normal cicatrices could be found: he thought it had long been settled in the minds of medical men, that no conclusions could be drawn from the condition of the cicatrices. If they were well-formed, it would be satisfactory; but if they were not, he should not have a right to say that the vaccination was not properly done, for if inflammation had followed the operation, such changes may occur as to remove all appearance of the vaccination, leaving only the modification of the constitution as a sign of what had been done. His conclusions relative to the different law in the system established after puberty with reference to vaccination, were drawn, not from hospital statistics, as Dr. Snow seemed to expect, but from an extensive correspondence all over the kingdom. He had never known any one who had seen modified small-pox under puberty, nor had he found any description of it in books, or elsewhere. It occurred in the adult only.* Dr. Webster had observed that he (Dr. W.) did not wish, by his paper, to diminish the confidence reposed in vaccination. He (Dr. G.) trusted that no one did, for vaccination prevented the outbreak of small-pox in one-half of the population; for if we take the average of the people all over the world, we shall find that one-half die before they attain the age of puberty.

Mr. Arnott remarked, that Dr. Gregory had mentioned, that in seven years, they had had in the hospital 1,500 cases of small-pox after vaccination, and that the mortality was 5 per cent. He would wish to ask how many cases they had had in the same time, of small-pox, without previous vaccination, and what was the mortality?

Dr. Gregory stated, that the total number in the hospital in the seven years, was 2,854, of which number 1,500 had been vaccinated previously. This gave about 408 cases in each year. The total deaths were 599, and the mortality of cases after vaccination never exceeded 5 per cent. The number of cases of small-pox without previous vaccination was, therefore, 1,354, and the mortality 524.

Dr. Addison put a question to Dr. Gregory, as to the identity of chicken-pock and small-pox.

Dr. Marshall Hall was just going to ask Dr. Gregory the same question, viz., his opinion of Dr. Thomson's view of the identity of chicken-pock and modified small-pox? He also wished to ask Dr. Gregory another question. It sometimes happened that vaccination did not take. Was the patient then liable to small-pox? A boy of his own had been vaccinated repeatedly without effect; no vesicle ever formed. He was sent to Eton when 13 years of age, and, on returning in 1844, for the summer holidays, went to Brighton. There, on August the 12th, he was found to be covered with an eruption, some of the spots exhibiting the form of distended vesicles, of moderate size, observed in *chicken-pock*, and others going through the regular course of *horn-pock*, occupying five or six days. One or two on the face left distinct *pits*, as seen in *small-pox*. He added, that such a case seemed to show the unprotected state of the patient, when vaccination had failed; and, to confirm the opinion of Dr. Thomson, that variella and modified small-pox were the same disease, for they occurred together. Some children seemed to possess peculiarities in regard to their susceptibility to the exanthematous diseases. His son, on returning to Eton, took scarlatina. There was, however, no rash on the skin; but the sore throat and the enlarged papillæ of the tongue were so distinctly scarlatinous, that he (Dr. Hall) had had a drawing made, as they so well represented this form of eruption.

Dr. Gregory, after paying Dr. Addison a neat compliment for his services to the Society, as its President, expressed his belief that chicken-pock and the modified small-pox observed after vaccination were two diseases, essentially and totally distinct. There is some analogy between them; they may be allied, but still they

* Although such cases may not have been recorded, still they occasionally occur. One case happened in the family of the reporter, in the person of a female relative, then ten or eleven years of age; and within the last few years he attended three members of a family, all under the age of fifteen, who were suffering from modified small-pox after vaccination. The other members of the family were, consequently re-vaccinated, but the characteristic pustule did not form in any.—*Rep.*

are quite distinct from each other. With respect to Dr. Marshall Hall's son, he thought his constitution had been subjected to the full influences of the variolous miasm, and that it had done its worst. He certainly might be unfortunate enough to be again attacked, but it was not very probable.

Dr. Stewart said, that his object in bringing his case before the Society, was to contrast it with Dr. Webster's, which ended fatally, to induce observations on the subject of vaccination and variola, with the ulterior view of drawing attention to the prejudices against vaccination, and the bad effects of inoculation, the use of which can only be justified by proving it to afford a full protection against future attacks. Dr. Mayo had, however, shown that, in one epidemic, those who had been inoculated, were attacked more severely and more fatally than the vaccinated. The same result had happened in an epidemic of small-pox in Devonshire. The occurrence of only 1500 cases of secondary small-pox, in persons who had been vaccinated, in seven years, out of the two or three millions* in this metropolis, was not a proof against the protecting power of vaccination. But we should not look in hospitals for proof of that power, but in such districts as he had visited in St. Pancras, in close, ill-ventilated rooms, where the worst cases of the disease were to be found. There its influence was well shown, the vaccinated escaping every danger.

ANNIVERSARY MEETING.

The election of officers for the ensuing year having taken place, the reports of the Secretaries and Treasurer, were read; the latter shewing that the income for the past year, was £1,809 9s. 7d.: the expenditure £2,117 17s. 5d., being an excess of £308 7s. 10d.

The annual address was next delivered by the President, in the course of which he alluded to the loss the Society had sustained during the previous twelve months, by the decease of several Fellows, viz., Dr. Prout, Dr. Haviland, Mr. Crosse, Mr. Malyn, Mr. Stafford Lee, and Mr. Joseph Freeman, giving at the same time a brief sketch of each, drawn up by a friend of the respective deceased.

MEETINGS OF SOCIETIES.

MEDICAL,	Saturday,	March 15,	at 8 P.M.
STATISTICAL,	Saturday,	do. 15,	at 3 P.M.
[The Anniversary.]			
CHEMICAL,	Monday,	do. 17,	at 8 P.M.
LINNÆAN,	Tuesday,	do. 18,	at 8 P.M.
MICROSCOPICAL,	Wednesday,	do. 19,	at 8 P.M.
ROYAL,	Thursday,	do. 20,	at 8½ P.M.
ROYAL INSTITUTION,	Friday,	do. 21,	at 8½ P.M.
MEDICAL SOCIETY,	Saturday,	do. 22,	at 8 P.M.

THE INSTITUTE MEDICAL JOURNAL.

Quarterly Subscriptions, by prepayment, Six Shillings. If by post-office order, the same to be made payable at the General Post Office, to *Thomas Martin*.

THE INSTITUTE.

LONDON, SATURDAY, MARCH 15, 1851.

ON THE PRESENT CONDITION AND PROSPECTS OF THE GENERAL PRACTITIONERS.

THE present century has brought about a complete revolution in the practice of the Medical Profession, and in the estimation in which its professors are respectively held. The knowledge of disease, and the methods of treating it, are no longer sought for in the musty records of colleges and Uni-

versities, and the mere possession of academical degrees no longer, in itself, commands the respect of the public; but the practitioners of our noble art have learned to study the mechanism of the human frame and the derangements to which it is liable, by the investigation of Nature herself; and the gold-headed cane, the silk stockings, and the powdered wig of the ancient physician, have been abandoned for the scalpel, the pleximeter, and the stethoscope of the modern practitioner. The Chemistry of Paracelsus and of Stahl has vanished before the brilliant discoveries of Priestley, of Davy, and of Faraday; and the dogmata of the schools have been replaced by the carefully recorded results of observation and experiment. Credence is no longer blindly attached to the dicta of authority, but every one is at liberty to judge, to think, and to act for himself; and an enlightened empiricism (we use the word in its original, and not its ordinary meaning), has taken the place of the vague and shadowy hypotheses, which fancy has from time to time invented, but which reason disavows.

At the close of the last century, the state of the Medical Profession was unsatisfactory in the extreme; medical education could hardly be said to exist; lectures on medical subjects were but rarely delivered; and innumerable obstacles were presented to the acquisition of professional knowledge. The mystic importance which was attached to a degree, compensated, in the eyes of the public, for the utter absence of sound knowledge in him who held it; while the Apothecary was very little better than a mere shopkeeper, who prescribed or dispensed drugs, of which he knew very little, for curing the ailments of a complicated mechanism, of which he knew still less.

The College of Physicians of London, which had been incorporated by Henry VIII., but whose jurisdiction extended only to the distance of seven miles from London, exercised but a feeble influence on the advancement of Medical Science; while the College of Surgeons was resorted to by a few of the more ambitious Practitioners of Medicine and Surgery, who ventured to submit themselves to its examination. But with a generosity, which does them infinite credit, the General Practitioners of that day felt their ignorance and their weakness, and hesitated not to confess them; and acting not for themselves but for their posterity, they associated themselves together, and successfully petitioned the Legislature to remedy the existing state of affairs.

Their efforts resulted in the passing of the Act of 1815, which, although falling far short of the intentions of its founders, and disappointing the hopes of the profession, has nevertheless worked a marvellous change in the condition of medical affairs. Although the management of the Act has been entrusted (on the refusal of the Colleges of Physicians and Surgeons) to the Society of Apothecaries, yet the Apothecary of ancient times retains nothing but the name; instead of being a shopkeeper he has become an educated gentleman; instead of being the tool of the Physician he has become his honourable rival; and although there are some who pretend that the General Practitioner of the present day holds a degraded position in the profession, such an imputation is as unjust as it is untrue.

Since the Act of 1815, the Science of Medicine has been

* The number is not in reality 1,500 in two or three millions, for the 1,500 occurred in seven years, while the population of the metropolis is, at least, two millions. Statistics therefore show, that the number of cases of small pox after vaccination is only about 250 in two millions, or 1,500 in fourteen millions.—*Rep.*

advancing with gigantic steps, and, although it is no part of our intention to attribute to that enactment more than is strictly its due, yet it cannot be denied, that by means of the extended education of the Medical Pupils, the researches of modern Chemistry, Physiology, Surgery, and Medicine have become familiar to the minds of the profession, and are now made the foundations of modern practice. Nor have these obvious advantages been confined to the practitioners of London, or of the great provincial towns: but hosts of well-educated, and some highly-educated men, have been annually sent forth to every village and hamlet throughout England and Wales, carrying with them from the Medical Schools, copious stores of knowledge for the benefit of the poorest and most abject members of the human family, who were formerly left to the care of the quack and the bone-setter, or abandoned to their fate. The examinations which were first instituted by the Court of Examiners appointed by the Apothecaries' Society, were crude and imperfect, as might be expected; but with a foresight which is worthy of the highest praise, the Examiners of that day determined that their successors should enjoy advantages of which they themselves had been destitute, and they gradually extended their curriculum of education to meet the wants of the age, and to keep pace with the increasing diffusion of knowledge.

But whether it be, or be not, admitted that the operation of the Act of 1815 has been altogether beneficial, it cannot be denied that the General Practitioners of this country have occupied a most honourable position in society since the commencement of the present century; and although it cannot be pretended that the mere possession of a licence or diploma necessarily implies superiority of talent, yet it is certain that none of the legally-qualified practitioners of the present day are or can be so grossly ignorant as many or most of their predecessors undoubtedly were. The efficiency of the examinations conducted by the medical licensing bodies, the stringency of the regulations by which both pupils and teachers are guided in the performance of their mutual duties, have had a most marked and beneficial influence upon the progress of Medical Science, and while *all* the existing members of the profession have been rendered more or less competent to the treatment of disease, the increased facilities for acquiring knowledge have afforded numerous opportunities for some to aspire to and to attain eminence. Multitudes of those who are now enjoying the highest honours and emoluments of metropolitan and provincial practice, entered the profession through the portals of the Apothecaries' Hall, thus affording a convincing proof that a man's eminence does not depend upon the place or the school where he was educated, or the particular examination he may have passed, but upon the native energies of his mind, stimulated to activity by the opportunities placed within his reach. But these great and important results of the education of the General Practitioners have not been confined to our own country, but thousands of well-educated men have been sent to the farthest limits of the habitable globe, to dispense the blessings of Medical Science among all the nations of the earth. These men, too, be it recollected, whether serving upon the broad ocean, or upon the field of battle—whether engaged in carrying out troops, or emigrants, or convicts, or in pursuing the peaceful objects of our profession in our numerous and ra-

pidly-increasing colonies—are all GENERAL PRACTITIONERS, who are educated, or ought to be educated, in such a manner as to be enabled to practice *all* the branches of the medical art, whether it be Surgery, Medicine, Midwifery, or Pharmacy.

Such, then, being the important results—important to the profession and important to the whole human race—which have been already achieved, it becomes us not to relax in well-doing, but to unite our general efforts in the promotion of the great and good cause. Let it not be forgotten, that all the respectability which the profession has hitherto enjoyed, and all the advantages which have accrued to the community from the improvements in our art, have sprung directly from the improved education of our profession; and, notwithstanding the operation of injurious laws and the establishment of artificial class-distinctions—notwithstanding the jealousy which unhappily exists among some of the members of our Profession—notwithstanding the apathy which sometimes prevails in a cause where energy and activity are essentially necessary—yet the Profession of Medicine, both as an art and a science, occupies a most lofty position in this country, and its achievements in every department have been surpassed in no other age, and by no other country. Let it then be our endeavour, by union, harmony, and vigorous co-operation, to sustain the high position which British Medicine and Surgery now most justly occupy; and as the different corporate bodies have shown but little sympathy with the sufferings which afflict us, and as they have often appeared disposed to protect the rights of *the few* at the sacrifice of the wants, the feelings, and the wishes of *the many*, it is our duty to *help ourselves*, in the hope that a calm and dignified attempt to redress all real grievances, a strenuous and continuous course of exertion in improving still farther the education of our fellow-practitioners, and the innate strength and goodness of our cause, will finally prevail over those sinister influences by which our efforts are now beset, our best hopes blighted, and our prospects marred.

That the General Practitioners of this country should seek to be incorporated in a College of their own, is nothing more than a fair and reasonable request, and is the direct and necessary consequence of the injurious treatment which they have experienced from the existing Colleges. The College of Physicians has consistently repudiated all connexion with General Practice, and although comprehending among its Fellows and Members some of the most eminent names in the Profession, it still remains little else than a West End Club; and, indeed, its charter gives it no power or control beyond the distance of seven miles from London. The College of Surgeons has, with equal consistency, repudiated all connexion with General Practice; but, unlike the College of Physicians, it has always maintained itself out of the pockets of the General Practitioners, who are thus made to support an Institution, from the portals of which they are thrust away with contempt, as soon as they have received their diplomas. The Society of Apothecaries, important as their services have undoubtedly been in the cause of Medical Education, cannot be considered as offering a home to the great bulk of the Profession; and there is neither a probability nor a possibility that Apothecaries' Hall can ever be regarded as the Temple of British Medicine. Hence the general demand for a new Incorporation, founded upon an

enlarged and liberal basis, is not only a matter of expediency, but of absolute necessity. It is only just that a portion of the Profession, now numbering at least nine-tenths of the whole body, should be adequately represented by a College which reflects their own views, feelings, and interests; and while the two hundred London Physicians are adequately protected by the College in Pall Mall; and while the three or four hundred *pure* Surgeons are well taken care of in the stately structure in Lincoln's Inn Fields; it is surely not

unreasonable that the many thousands of Practitioners who diffuse the blessings of Medical Science, in all its branches, to the mass of the community, should be able to assemble in a College, where artificial distinctions would cease to exist, and where talent alone would give a title to pre-eminence. We shall have occasion, on future occasions, to recur to this subject; in the meantime let us remind our professional brethren, that union is strength; and that perseverance in a just cause must finally achieve a triumph.

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

(Extracted from the 'Paper of Transactions,' dated July, 1845.)

Continued from page 181.

Marsden, R. M., Ormskirk, Lancashire
Marsden, William, Thornhill, Dewsbury, Yorkshire
Marsden, W., 65, Lincoln's Inn Fields
Marsh, R., Stratford
Marsh, Robert, Marksbury, near Bath
Marsh, H., Aldborough, York
Marshall, F. H., Moulton, Northampton
Marshall, S., East Retford
Marshall, G. H., Kington, Hereford
Marshall, R., 27, Great Charlotte street, Blackfriars road
Marson, J. F., Small-pox Hospital
Marston, H. Brigg, Lincoln
Martin, E., 6, Somers street, Hyde Park
Martin, C., Neckinger house, Bermondsey
Martin, J. C., Oundle, Northampton
Martin, J. H., Bridgenorth
Martin, A., Rochester
Martin, T., Reigate, Surrey
Martin, P., Reigate, Surrey
Martin, P. J., Pulborough, Sussex
Martin, J., Oundle
Martin, J., Highworth, Wilts
Martin, H., Haverhill, Suffolk
Martin, G., Clare, Suffolk
Martindale, W., 31, Myddelton square
Martyne, F. D., St. Columb, Cornwall
Masefield, W., Stone, Stafford
Mason, G., Deal
Mason, M., Sudbury, Suffolk
Mason, J., Kilsby, Northampton
Mason, J. W., 41, Beech street, Barbican
Massey, J., Nottingham
Massey, T., 21, Church street, Camberwell
Mather, J. B., 63, Bunhill row
Mather, R., Grantham, Lincoln
Mathew, J. E., De Beauvoir square, Kingsland
Matthews, Robert N. B., 12, Foxley road, Kennington
Matthews, J., 7, Spencer st., Goswell road
Matthews, J.
Matthews, J., Burton, Somerset
Matthews, A., Robertsbridge, Sussex
Mathews, Arthur
Maul, H., Southampton
Maurice, W., Bristol
Maxfield, A., Southampton
May, W., 26, Bow lane
May, E., 16, Mount place, Whitechapel rd.
May, W. H., Leicester
May, G., Maldon, Essex
May, Joseph, Devonport
Mayberry, W. C., Earl's Court terrace
Maybury, W. A., 3, Little Tower street
Mayor, E. S., Clifton, Surgeon to Lawford's gate House of Correction
Meade, E., North Walsham, Norfolk
Meates, W. C., 41, Chester square

Meaton, W., Newcastle-upon-Tyne
Mee, W., East Retford
Meeke, C. S., Birmingham
Meeres, T., 52, Brick lane, Spitalfields
Mehev, F., 61, Trinity square, Borough
Meissner, A., 70, Great Tower street
Meldola, E., 6, Great Ailie street, Goodman's fields
Melland, F., Rusholme, near Manchester
Mellor, T., Manchester
Mennell, Z., Malton
Menzie, R., 86, Upper Stamford street
Mercer, J. J., Halstock, Dorset
Mercer, T., St. Helen's, Lancashire
Mercer, W., Biddenden, Kent
Meredith, E. T., 15, Charles street, Westbourne terrace
Merrett, W. G., 49, Leadenhall street
Merrick, —, Beckenham, Kent
Merriman, C. A., Epping, Essex
Merriman, John, Kensington
Merriman, James, Kensington
Merry, R., Hemel Hempstead, Herts
Merry, R., Shottisham, Norfolk
Merson, W. F., Tiverton, Devon
Messeena, J. N., 199, High street, Poplar
Metcalfe, R. J., Tidd St. Mary's
Metcalfe, J. B., Church street, Hackney
Mewson, W.
Michele, J. G., 31, Charlotte street, Fitzroy square
Mickle, T., Saffron Walden, Essex
Micklethwaite, B. W., Gomersall, Yorkshire
Middleton, A., 22, Finsbury place
Middleton, W. G., Basinghall street
Middleton, J., 8, New Basinghall street
Middleton, John, Adam street, Edinburgh
Middleton, T., Salford
Miller, W. H., Dartmouth
Miller, I. D., Frome
Miller, H., Soham, Cambridge
Miller, C., Penzance, Cornwall
Miller, C., Great Wakering, near Rochford, Essex
Miller, W. sen., Poole, Dorset
Miller, W., jun., Poole, Dorset
Millett, J. T., Penzance, Cornwall
Miles, Henry, Gillingham, Dorset
Miles, J., Salisbury
Miles, J., 17, Charter-house square
Miles, J., 78, Gracechurch street
Millar, J., Bethnal House, Bethnal green
Millar, J., 4, Colet pl., Commercial rd. east
Millar, —, 48, Clifton street, Finsbury
Miller, C. M., 1, Claremont terrace, Stoke Newington road
Mills, F. A., Norwich
Mills, W. V., Ipswich
Mills, W. P., Ipswich

Milner, P., Merfield
Milner, R., Salford
Milmorpe, J., Topcliffe, Thirsk, Yorkshire
Mimpriss, T. R., 23, Prospect place, Wandsworth road
Mines, W., Diss, Norfolk
Minshall, J. S., Mount pleasant, Liverpool
Miskin, N., 59, Bridge street, Lambeth
Mitchell, J. T., 33, Harleyford place, Kennington
Mitchell, R., Upper road, Deptford
Mitchell, H., Addenbrooke's Hospital, Cambridge
Mitchell, J., Keighley, York
Mitchell, W., Birstall, West York
Mitchell, T., Bedford
Mitchell, E. D., Brighton
Moat, W. C., 28, Upper Berkeley street
Moffett, W., North Shields
Mollard, J. S., Congleton, Cheshire
Monckton, J., Brencley, Kent
Monday, James, Rawlings, Olveston, near Bristol
Monks, F., Norwood, Surgeon to the Poor Law Schools, Westoe hill
Montford, W. H., Douglas, Isle of Man
Moon, William, Tottenham, Middlesex
Moore, L. W., Debenham, Suffolk
Moore, A., Metheringham, Lincoln
Moore, W., Brackley, Northampton
Moore, N., Ashton-under-Lyne, Lancashire
Moore, J., Great George street, Liverpool
Moore, E., 86, Bethnal green road
Moore, E. Duke, 10, Arlington street, Piccadilly
Moorman, W., St. Columb, Cornwall
Mordaunt, J., Mare street, Hackney
More, C.
Morgan, David, T., Vrongoch, Lampeter
Morgan, H., Derrynock, Brecon.
Morgan, W. H., Mordiford, Hereford
Morgan, W., Bridgend, Glamorgan
Morgan, Charles, 44, Bedford street
Morgan, J., 22, Chapel street, Grosvenor place
Morgan, W. P., 48, Old street road
Morley, J., Oldham
Morley, Henry, jun., Madeley, Shropshire
Morley, J. W., Horncastle
Morley, H., Midhurst, Sussex
Morley, H., jun., Madeley, Shropshire
Morrish, J., 62, Sloane street
Morris, W., Camberwell new road
Morris, T., Gresford, Cheshire
Morris, D., Colchester, Essex
Morris, E., Banbury, Oxon
Morse, E., 1, South place, Kennington
Mortimer, W., Clifton

(To be continued.)

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLXXII.—ON THE PHYSICAL EXAMINATION OF THE ABDOMEN, IN HEALTH AND DISEASE. By CHARLES J. B. WILLIAMS, M.D., F.R.S.—*Examination of the Abdomen by Palpation.*—Like the sight, the touch acquaints us with the form, size, and movements of objects; but it further instructs us with regard to their temperature, surface-feel, consistence, resistance, and weight; and in the case of soft, pliable, and yielding objects, such as the abdomen, the touch reaches beyond the surface, and may feel more or less of all the same properties in the deeper-seated parts. Thus, by palpation, or handling, of the abdomen, we may learn far more than sight can teach us, of the physical properties, and therefore of the healthy or morbid condition of its internal organs; and the more carefully we analyze these physical properties, and understand their relations to the parts which possess them, the more instructive will be the knowledge which we derive from them.

As to the sight, so also to the touch, the abdomen is made up of its walls and the viscera within them; and the latter being felt through the medium of the former, will be more or less distinct, according to the condition of the abdominal walls. When these are very thick or tense, it may be difficult to feel anything through them: when they are thin, and more especially when they are also flaccid, the condition of the contained parts may be determined with great nicety. The thickness of the walls depends chiefly on the quantity of fat, and where this is very great, palpation can only afford obscure results; the touch must be applied with considerable pressure, to reach beyond this superficial mass. The tension of the walls depends on the tonic contraction of the abdominal muscles, often increased by voluntary restraint, under the apprehension of pain, or from nervousness; and it may greatly interfere with the examination by rendering the walls too hard to permit anything to be felt through them: but this muscular rigidity may generally be reduced by calming the patient's fears, and by diverting the attention from the region by questions on some other interesting topic regarding the health, whilst the hand is kept applied with a gentle pressure, and softly rubbed over the surface of the abdomen, until the muscles become relaxed, and the examination is properly effected.

The palpable signs of *air in the peritoneum* are very characteristic. The usual moderate elastic softness of the abdomen is replaced by a tympanitic elasticity, remarkable for its resilient feel, and even on superficial pressure yielding the same light and springy resistance. Effused as air usually is suddenly in consequence of perforation of the alimentary canal, its phenomena may be much masked by the intense pain and other symptoms of severe disturbance which usually accompany that accident, and which, by spasmodic contraction of the abdominal muscles, render palpation difficult. In the absence of such symptoms, which are in themselves pretty significant, the physical diagnosis is easy, as in the following case:—

A woman, fifty years of age, was admitted under my care for disease of the abdomen, which I considered malignant. The liver was much enlarged, with nodulated inequalities, and was an object of palpation at every visit. One day, before asking a question, or hearing the daily report, one touch of the epigastrium drew from me the exclamation—"Here's air in the peritoneum!" The region, which before had presented the hard uneven resistance of the diseased liver, now felt soft, very elastic, and uniform on its very surface; like, in fact, a thin vulcanized India-rubber air-cushion moderately distended. The peculiarity of the feel, contrasted with the previous condition of the abdomen, made me sure that nothing but an extravasation of air could account for the change; and on further examination, the superficial tympanic sound, with metallic echo on percussion, and the gurgling near the surface at the sides, where liquid mixed with the air, confirmed the first impression. The patient had suffered more than usual pain, but was now easy, and her countenance calm, under an opiate; the pulse was, however, very rapid and thready, and the feet and legs becoming cold. She died in about twelve hours. The air was found in the peritoneum as indicated, occupying the whole front of the abdomen; the liver was large, and studded with cancerous tubera: lying underneath, and attached to it,

was a cancerous mass involving the pylorus, duodenum, and transverse colon. The perforation was in the duodenum.

As peritoneal tympany, or pneumo-peritoneum, occurs only in case of perforation of the alimentary canal, its palpable signs as just described, and those of superficial tympanic stroke-sound with metallic tinkling, to be noticed hereafter, become evidences of the occurrence of that mortal accident. But perforation may occur without the extravasation of sufficient air to produce the signs; their absence, therefore, will not disprove the existence of perforation. In the formation of limited fistulæ in the peritoneum and walls of the abdomen communicating with the intestines, the superficial gurgling or croaking under the pressure of the fingers is a very palpable sign; I have met with it in more than one case. It is more distinct and superficial than the gurgling of reducible hernie.

Palpable Signs of Solid Indurations and Enlargements in the Abdomen.—Solid bodies of flattened shape are sometimes met with in the walls of the abdomen, underneath the integuments, or between the abdominal muscles and peritoneum. In the former situation, they can be felt to move freely on the muscles, even when these are tightened. When attached to the abdominal peritoneum, they may be felt to remain fixed during the movements of respiration, which would carry them a little upwards and downwards, were they connected with the abdominal viscera. In making observations on these movements, the umbilicus, linea alba, or some other conspicuous object on the walls, will assist the eye or the hand in seeing and feeling what is attached to the walls, and what moves with the viscera underneath. Indurated patches in the situations now alluded to, I have known both of a caecoplastic or low exudatory, and of a malignant kind; the latter being commonly distinguished by its penetrating through several textures, and often presenting nodular irregularities.

Laminar indurations of the omentum, or intestinal peritoneum, may be felt by careful palpation when the walls are relaxed, practised both perpendicularly, and from side to side. Gentle perpendicular pressure detects the greater resistance offered by the induration, as compared with adjoining spots; but delicate lateral palpation may even detect the edges of the induration, and determine its thickness, as well as its superficial character. The absence of resistance on firm pressure, and of dulness on percussion, distinguishes these superficial indurations from more solid tumours.

A thickened state of the coats of the intestines is of much commoner occurrence than is generally supposed; and in most instances of chronic diarrhoea it can be detected by careful palpation in the region of the cæcum, or of the ascending or the sigmoid colon. For this examination the patient should be in bed, lying flat on the back, with the muscles quite relaxed; the abdomen is then to be felt by gentle steady pressure with the flat fingers, gradually slid to successive parts; the greater superficial resistance, in one or more of the regions just mentioned, will then become very obvious; and it is sometimes, but not always, accompanied by tenderness on deeper pressure in the same spot. Although feeling thus hard to superficial pressure, it yields with some resistance to firmer pressure, and gives a tympanitic sound on percussion. This thickening of the large intestine apparently results from a low inflammation of a chronic or subacute kind, and is usually attended by occasional attacks of diarrhoea, or even slight dysentery, sometimes alternated with constipation. A married lady, æt. 30, had for more than twelve months been liable to attacks of severe diarrhoea, which greatly reduced the flesh and strength; the catamenia became irregular and defective; and the whole constitutional powers were failing. Travelling on the continent had been tried with temporary benefit; but the attacks continued to recur; and the bowels being confined in the intervals, and the appetite bad, no progress was made towards recovery. In this case I found distinct fulness, with superficial resistance, from the right iliac to the hypochondriac region; and an irregular but moveable resistance was also felt in the left iliac fossa. All this tract was tender on pressure, even when diarrhoea was absent. Counter-irritation over the course of the colon, first by a blister, and subsequently by solution of iodine, using, at the same time, an India-rubber belt, lined with soft wool, succeeded in removing the thickening of the bowel. After a month's treatment, there was no return of diarrhoea, and the health has been uniformly good ever since, a period of five years. In another case, that of a married lady, æt. about 36, severe abdominal irritation, with dysenteric diarrhoea, was brought on by too frequently bathing in the sea. The symptoms were repeatedly relieved by astringents, farinaceous diet, and confinement to bed; but they always recurred as soon as she attempted to get up and return to the usual diet. Being summoned to Ramsgate to see her, I found, on examination of the abdomen, a very palpable hardness and

fulness along the whole tract of the colon, from the cæcum to the sigmoid flexure inclusive; and it was only after repeated blistering, and counter-irritation with iodine over these parts, whilst the bowels were regulated by small doses of sulphate of copper and narcotic extracts, with occasional mild alterative aperients, that a permanent cure was effected. In many cases of chronic diarrhœa and dysentery I have detected the same physical signs of thickening of the large intestine, and have by them been guided to the same successful mode of treatment.

In these cases the thickening of the intestine is probably the result of a low inflammation, sometimes excited by the injudicious administration of astringents to stop a diarrhœa. The thickened bowel has an irritable mucous membrane, whilst the regular and efficient contraction of its muscular coat is impeded by the deposit, which consists partly of thickened epithelium, and partly of exudatory matter under the mucous membrane. Hence, too, the combination, or alternation of irritative diarrhœa with costiveness and retention of scybala. Practitioners are apt to regard the scybala as the true cause of the irritation and diarrhœa; and doubtless they may contribute to keep it up: but their repeated formation and retention are really due to the altered structure and impeded function of the intestine, and are to be prevented only when its motory and secreting powers are properly restored.

In feeling for these intestinal thickenings, some variation of manipulation is necessary in different parts of the abdomen. The cæcum is usually quite superficial, often forming a fullness or prominence in the right iliac region, and extending more or less towards the linea alba and upwards. Its thickening is detected by gentle pressure meeting with more resistance and hardness than is felt in the hypogastric or left iliac regions, whilst the sound on percussio is still hollow, although often less so than usual. The ascending and transverse parts of the colon usually lie deeper; and, if within reach, require more pressure to test their resistance; which, if increased, is to be distinguished from that of an enlarged liver by being more rounded, and with a hollow stroke-sound. The sigmoid flexure of the colon lies still deeper in the left iliac fossa; and, if thickened, is to be felt from the left side, by the flat fingers gradually pressed with a rotating motion and increasing firmness; it is usually contracted, contains little or no air, and feels like a large curved cord, in some degree moveable, in the hollow of the ileum.

The thickening of the intestine, hitherto described, is supposed to be of inflammatory origin; but it may save repetition to mention here, that *malignant disease* may grow in the same situations, present somewhat of the same signs, and be detected by similar manipulation. The diagnosis of malignant formations may generally be established, both by reference to the constitutional symptoms, and by peculiarities in the local disease. On the former we need not dwell at present. The peculiarities of malignant growths, as distinguished from inflammatory deposits, consist in their assuming more the form of circumscribed tumours; both from their being developed in more nodular masses, and from their disposition to penetrate and amass together contiguous tissues and organs, and further to involve them in their ulterior processes of irritation, contraction, ulceration, &c. Even diffused malignant growths on the intestines may therefore generally be distinguished from simple inflammatory thickening by their greater irregularity of surface, being more nodulated and circumscribed, and often connected with a deeper-seated tumour, which affords much more than the superficial resistance of thickened intestines.*

Malignant disease of the stomach, when affecting the pyloric end, and often involving a portion of the duodenum, colon, and pancreas, in most cases forms a palpable tumour, to be felt on pressing more or less deeply to the right of the epigastrium. Much tact and tenderness are often required to enable the hand to reach deep enough to feel the tumour; and a favourable opportunity should be taken when the bowels are empty, and when

there is the least amount of sickness or tendency to pain. The pressure should be rotatory and gradual, in the direction of the spine. The tumour, when felt, is rarely quite dull on percussion, and often pulsates, from the motion of the subjacent aorta; but the pulse is in one direction only, and not diastolic, or enlarging at each beat, as in the case of aneurism. The tumour is easily distinguished from the liver by its being deeper seated; or if it be larger and approach the surface, by the tympanitic interval between it and the mass of the liver, the signs of which belong to the lower right ribs, and upper part of the epigastrium. Scirrhus of the cardiac end of the stomach is less within the reach of palpation, as this portion lies both deeper and more under the ribs. I cannot now call to my recollection a case in which I have been able to feel the tumour where it was confined to this end of the stomach. On the other hand, I can scarcely remember one case of malignant disease in other parts of the stomach and intestines, where, sooner or later, a tumour or induration has not been felt, so as to serve to confirm a diagnosis, which is often too evident from the general symptoms.

When malignant disease causes obstruction of the intestines, those portions above the impediment may become enormously distended, and their outline may often be traced by palpation, as in cases of feculent accumulation; but this tends to put out of reach the obstructing lesion, which is buried in the accumulated mass. If the stricture be in the rectum or sigmoid flexure, its presence may sometimes be inferred by the obstacle opposed to a finger, to a bougie, or to the contents of an enema introduced by the rectum.

Solid massive tumours in the abdomen, as those of a much enlarged liver or spleen, present certain palpable characters in common, which should be noticed before we advert to the individual varieties. In proportion to the mass which is in contact with the walls of the abdomen, an enlarged liver or spleen will present the resistance and weight of a solid body, soft or hard, as the case may be. When soft, it may not feel much more resisting and inelastic than the abdomen in general, especially if felt only in points with the ends of the fingers; but if pressed more in mass with the flat of the fingers, and more particularly if the weight of the tumour be brought to bear against them by a leaning forward or prone posture, the feel of the solid enlargement, although soft, becomes quite palpable, and may be contrasted with that of other parts of the abdomen containing intestines only. Again, a slight abrupt impulse given to one point of a soft solid may cause a kind of undulatory movement through it, which might be mistaken for fluctuation; but besides its wanting the soft and gravitating character of liquid motion, a distinction may be made by giving the body a flat push on one side, which will be communicated to the hand on the opposite side with the impulse peculiar to a solid body. In fact, by a little management, we may generally contrive so to handle and feel the tumour, as to infer from its consistence, resistance, weight, and shape, the nature of its material.

The test is easier when the tumour is harder and more dense, because then its greater resistance and weight are more obvious, and so strikingly contrast with those of the abdomen in general, that it is easy to feel the outline of the mass, and trace its precise shape and position. Its continuity, likewise, from front to back, or from side to side, can be determined by finding that a push or impulse is transferred by it, which it would not be, if fluid or air intervened.

In many such cases the weight of this tumour causes some variation in its position with change of posture; and we may avail ourselves of this to ascertain its form and dimensions, and its relation to the other contents of the abdomen. This is especially needful in the common combination of solid tumours with liquid effusion; the liquid, if abundant, putting the tumour out of reach, until, by its greater weight, it is brought to bear down against the walls.

The *liver* may enlarge in any or in every direction, upwards, downwards, and outwards, in front, at the side, and behind. Except when upwards only, a very rare case, the enlargement may be detected by palpation, as well as by percussion and inspection. The outward bulge is more obvious to sight than to touch; but if at all considerable, it may readily be felt on passing the hand from above downwards, from the middle regions of the chest to the upper parts of the abdomen, making a comparison of the right with the left sides. The bulge of liver enlarged laterally then meets the hand in a way that can hardly escape notice, and if found to be dull on percussion, and resisting pressure, it may fairly be diagnosticated as such in cases where no opportunity is given for inspection. The most common mode of enlargement, however, is downwards, with more or less general fullness; and as this brings the organ below the margin of the ribs under the pliant

* The following case is uncommon, but I mention it as both exceptional and yet illustrative of the importance of physical examination. An unmarried lady, aged 26, who had always been delicate, came under my care for gastric dyspepsia, which resisted all the usual measures. Intolerance of all nutritious food, and consequent wasting, ensued, and subsequently obstinate constipation and great distention of the intestines. An eminent physician who was called into consultation, considered the case hysterical, and advised the persevering use of galbanum and colocynth, purges, aided by the rue enema. I did not concur in that opinion; because by careful palpation I had distinctly felt a thickening of a portion of the intestines. I supposed this thickening to be the result of chronic inflammation, and apprehended ulceration and perforation should the obstruction continue. Perforation and speedy death did ensue; and examination discovered very extensive thickening of both stomach and ileum; but the thickening was from malignant disease, which in so young a person I did not anticipate. The ileocecal valve was almost closed by stricture, and the intestine above was ulcerated and perforated.

walls of the abdomen, it becomes the especial object of examination by palpation. The amount and kind of enlargement will determine the degree of facility in detecting it. If the liver do not extend beyond an inch or so below the ribs, it may not be felt at all; for it must be remembered that its margin being thin, it may oppose to the fingers no palpable resistance, especially if the walls of the abdomen are at all thick. But if the organ reaches two or three inches below, even without any material thickening or increased density, the fingers can scarcely fail to feel its resistance, particularly when aided by comparing the pliancy of the abdomen in the left hypochondrium. When the liver is still more enlarged, its margin usually becomes thickened as well; and besides the very distinct resistance which its anterior surface offers to the fingers, the lower margin may now be felt as a distinct ridge by the fingers pressed into the abdomen below it, and then moved rather briskly upwards. For the examination of the liver, the sitting, standing, or leaning forward posture, answers best; the observer placing himself either in front, at the side, or behind, according as he can best apply his hands to the abdomen.

It is in the case of induration with enlargement, that disease of the liver is most obvious to palpation. There is then no need of comparison with other parts of the abdomen; the hard substance of the organ forming a tangible object, the surface, outline, and irregularities of which may be independently explored in all their details. In such cases we can often determine with great nicety whether the substance is granular or uniform; whether the edge retains its wedge-shape, or has become thick and rounded by deposit and the contractile process. We may often feel the under surface of the organ, and trace its inequalities, with the position and state of the gall-bladder.* Nor are these nice points of diagnosis matters of pathological or speculative interest only. They have a direct bearing on the prognosis of the case, and are by no means useless in guiding the treatment. The soft enlargements of the liver are in many instances tractable under remedial measures, especially those which increase and liquefy the secretion of the organ; and the transition to the state of induration is not so abrupt or universal as to preclude similar means from being highly useful, even where considerable hardening of the tissue has taken place; the salutary effect being generally attended by a palpable diminution of the hardness, as well as by a reduction of the dropsy, jaundice, and other consequences of the obstruction. In these more tractable cases of indurated liver, we do not feel the rugged surface and granular irregularities which are present in the more formidable kinds of cirrhosis; nor do we find the proofs of failure of function and degeneration of structures in the general symptoms—such as progressively failing appetite and strength; increasing jaundice and dropsy, although bile is excreted, and urine is not greatly deficient; gasping breathlessness, or orthopnea; fluttering or rapid pulse; with the ominous arcus senilis, &c.—indications of the worst kind, which leave no hope of real recovery.

The alteration in the shape of the edge of the liver, from wedge-shaped to rounded, often occasions a displacement of the organ from its natural position, which it is important to notice in reference to its physical signs. So long as the liver retains its proper shape, its anterior surface remains in close contact with the abdo-

minal walls, unless a liquid effusion happens to separate them, which is clearly evinced by the sign of *diahdyric** succussion before described. But when the lower margin becomes rounded, portions of intestines are apt to slip up between the walls and the liver, and to separate its lower part more or less from them. The liver thus becomes partially enveloped in intestines, and can no longer be felt distinctly. The gurgling of the intervening bowel may often be felt on pressure; and the prone position may cause the weight of the liver to compress it for a time, but it is not easy to displace the intestine when the shape of the liver is thus altered; and it is necessary to be aware of the fact, or we may consider the liver to be much smaller than it really is.

It is not necessary to dwell on the varieties of extent and form of enlargement of the liver determinable by palpation; but there is one which is so peculiarly diagnosticated by it as to deserve mention. I allude to dimpled cancerous tubera in the liver. The shape of these tumours, rounded, flattened, and umbilicated, or with central depression, is so characteristic, and they so frequently rise from the anterior surface of the enlarged organ, that in as many as five or six cases I have been able to feel them through the walls during life, and announce their existence, and the consequently unfavourable prognosis. Two of these cases, modelled in wax, are preserved in the museum at University College.

The *spleen*, when only moderately enlarged, lies deeper than the liver, and with the stomach in front of it; therefore, in feeling for it, below the margin of the left ribs, we must use deeper palpation, aiming the fingers obliquely upwards and to the left, instead of the superficial direct perpendicular pressure practised in testing the right hypochondrium for the liver. Its peculiarity of shape also is equally apparent; for so soon as it is sufficiently enlarged to come within the reach of the fingers, it offers to them the resistance of a rounded and somewhat moveable body, meeting the fingers and slipping aside under their pressure. With a further amount of enlargement, the spleen reaches lower under the ribs and nearer to the surface; and it then becomes more easily palpable, both from its more accessible position, and from its bulk and weight opposing a more decided resistance to the fingers. In its greatest degrees of hypertrophy, the spleen extends more or less down the whole left side of the abdomen, approaching the umbilicus in front, and reaching nearly or quite to the left ilium. When thus greatly enlarged, it is in contact with the walls of the abdomen under the whole margin of the left ribs from the spine to the epigastrium, or near it; it occupies the whole lumbar, hypochondriac, and iliac regions of the left side, and may in parts extend even across the mesial line. To all these regions it gives the peculiar resistance of a heavy solid body; compact, and transmitting a flat, heavy impulse, or push, through its mass; but not often hard; usually smooth and even on all surfaces but that which forms its right boundary, on which rounded prominences and intervening indentations can be felt. These correspond with the internal margin or pelvis of the spleen, into which it receives its vessels. To the right lie the intestines, which, by their elastic feel and hollow sound, contrast well with the dead heavy mass occupying the left of the abdomen, and sometimes causing considerable enlargement of its whole bulk.

These physical characters are in most instances quite sufficient to identify an enlarged spleen; but they are further to be confirmed by the results of percussion, and by the general symptoms of pallid cachexia, which commonly accompany great enlargements of the spleen. I must not omit to mention, that the spleen, not being firmly sustained in its position like the liver or kidneys, may somewhat change its position according to the posture; and this, although it may prove an additional means of diagnosis, has sometimes been a source of error. In common with all the medical men who examined the case, I once mistook a much enlarged spleen for an ovarian tumour. It occupied the lower half of the abdomen; its upper margin reaching from the right iliac obliquely to the left lumbar region; and the rounded prominences of the upper surface were supposed to be cysts of an ovarian tumour. They proved to be the protuberances of the vascular or inner surface of the spleen, which had fallen completely out of its place, so that this surface now lay uppermost, whilst that which usually occupies the side rested on the pelvis.

The *kidneys*, from their deep position in the abdomen, might seem to be beyond the reach of palpation; but, except in cases of considerable thickness of the walls of the abdomen, or of their distension by the bulky contents of the intestines, or by effusion in the peritoneum, a little contrivance and tact will generally enable the hand to feel these glands sufficiently to detect any material enlargement, as well as to test their degree of sensibility.

* The following case is not less interesting in its diagnostic than in its pathological and therapeutic relations.

A dignitary of the Church, of sedentary habits, had for years been subject to attacks of severe pain in the hypochondria, attended with obstructed flow of bile, and generally followed by more or less jaundice. For some time these attacks were considered and treated as arising from gall-stones; but they had latterly become so frequent and severe, and the strength and flesh had been so much reduced, that great fears were entertained that there was malignant disease present. On my first seeing him, he was much emaciated; the liver did not reach below the margin of the ribs, and there was no feeling of any tumour or hardness underneath. One spot, just below the right ribs, two inches from the ensiform cartilage, was pointed out as being always tender, and the seat of the most intense pain during the attacks; then, I was assured, it became the seat of a hard swelling. On one occasion only I felt this swelling; it was then soft and of a rounded shape, but the attack was on the decline. This seemed to me so much like a distended gall-bladder, and the whole case so like one of biliary concretion, that I caused a diligent search to be made in the evacuations. In a few days a gall-stone was found, consisting of usual of cholesterol. The diagnosis being thus clearly made out, and the usual means of treatment having failed, it occurred to me that the cod-liver oil, which I was then giving extensively to phthisical and cachectic patients, might prove a means of dissolving the concrete biliary matter, and of promoting a better secretion in the liver. It was given, and answered perfectly; only one slight attack happening after its use; appetite, flesh, and strength, were gradually restored, and the gentleman has been constantly engaged in his ecclesiastical duties for nearly three years. But what is worthy of remark is, that under this treatment the liver enlarged in size, so as to reach nearly two inches below the margin of the ribs, and the tender spot descended with it, and in the single slight attack which did occur, it formed a palpable fulness just two inches below its former position. In a few weeks the tenderness was removed. This gentleman consulted me for a slight ailment this day (February 3). I found the liver still reaching between one and two inches below the margin of the ribs, but quite free from all tenderness or swelling.

* I propose this term (from *dia*, through, and *haidr*, water,) to express the characteristic sign of striking through liquid, noticed in this paper on the Palpable Signs of Liquid.

For this purpose it is necessary to displace the superjacent intestines; and this is to be accomplished by rotatory pressure, gradually, but steadily increased, until the hand sinks so deep in the abdomen, as to feel its posterior walls. The kidneys occupy the most prominent part of these, on either side of the spine, beneath the lowest bend of the ribs in front, a little above the line of the umbilicus, and from two to four inches to the right or left of it. For making this examination, the patient should lie flat on the back, with the limbs straight, but the muscles all as much relaxed as possible. The observer should be on the side opposite to that of the kidney that he is going to examine; and he should change sides to feel for the other. The right hand is then to be applied below the ribs, the fingers pressed flatly with a rotatory movement towards the kidneys; the steadiness of the pressure being maintained, if necessary, by the left hand applied on the right. The right fingers then, in their rotatory pressure, glance over the interior lumbar region; and the lower half of each kidney may usually be felt as only a slight flattened convexity in their natural state; but, when enlarged, forming a palpable prominence of rounded form, and often painful on pressure, the pain being sometimes referred to the loin, and the course of the ureter, as well as to the site of the kidney itself. In effecting this examination, it is often necessary to take off the patient's attention by conversation, to prevent those muscular efforts in the chest and abdomen, which are excited by nervousness or dread of pain, and which greatly interfere with the success of the exploration. Hence very timid or sensitive persons can rarely be examined satisfactorily in this way. The left kidney is more easily reached than the right, on account of the greater resistance opposed to deep palpation on the right side by the liver. The right, however, lies a little lower in the abdomen; and this brings it, in part, from under the last ribs in the right lumbar region, which is a spot in which both the fulness and tenderness of an enlarged right kidney may often be detected.

The diagnosis of moderate enlargement, with tenderness of the kidney, through deep palpation, is of great importance in relation to practical measures. Often, guided by it, have I succeeded in curing acute albuminuria, and in relieving that of a chronic character, by means of cupping, blisters to the loins, and hydragogue purgatives; and in many instances the reduction of the swelling of the kidney, with the entire disappearance of albumen and of granular cell-casts of the tubuli from the urine, and the restoration of the proper amount of excrementitious matter, has proved that the disease was merely congestive, or subinflammatory, and the cure has been permanent. In other instances the tenderness has subsided, but not the enlargement; and the urine, although improved, has given proofs of a remaining structural disease, in its never recovering a healthy standard in quantity, specific gravity, and freedom from albumen.

Very bulky enlargements of the kidneys are more readily detected by palpation, both in front and in the lumbar region; and their position, shape, and immobility, pretty well serve to distinguish them from other tumours. Cysts in the kidney, and the expansion of the gland by the purulent fluid of chronic pyelitis (formerly mistaken for abscess), may be felt as a rounded, soft, heavy, fluctuating tumour, in the lumbar and iliac regions. Malignant disease of the kidney is usually attended with considerable enlargement, which, from its irregular form, and from the amount of blood commonly present in the urine, in conjunction with the general history and other symptoms, will generally serve for the diagnosis.

In several instances, I have detected, by deep palpation, *enlargement and thickening of a ureter*, commonly in connexion with chronic pyelitis. It is felt as a hard cord-like body, deep in the iliac region, more or less moveable, and transmitting the pulsation of the iliac artery at the point at which it crosses it. The enlarged ureter is tender on pressure, and the pain shoots upwards to the loin, and downwards to the testicle of the same side.

Enlargement and induration of the mesenteric glands may be supposed to be a fit object for diagnosis by palpation, and by careful manipulation it may generally be detected; but not so readily as might be anticipated; for with it there often coexists so much tympanitic distension of the abdomen, as to prevent the hand from reaching the deeper parts. But by choosing times when the bowels have been well cleared, and by using firm flat palpation, with some rotatory movement, followed by an increased pressure towards the back, the nodular glandular tumours may often be discovered.

Further illustrations of the utility of palpation might be given in cases of solid ovarian and uterine tumours, of pregnancy, of psoas abscess, of malignant disease of the bladder, of pelvic abscess, &c., &c.; but this part of the subject has already exceeded my intended limits; and quite enough has been given to illustrate

the principles of manual examination of the abdomen. In my next communication, the acoustic signs of the abdomen will be considered.—*London Journal of Medicine*, March 1851.

CLXXXIII.—ON THE TREATMENT OF PERMANENT PSEUDARTHROSIS BY AN APPARATUS WHICH PERMITS THE USE OF THE LIMB AND OBVIATES THE NECESSITY OF AMPUTATION. By HENRY H. SMITH, M.D., Surgeon to the St. Joseph's Hospital, Philadelphia.—Few operations in surgery are more strikingly characteristic of the defects of the science than those of amputation of a limb on account of the existence of false joint.

When nature, under peculiar circumstances, shows herself unable to consolidate a broken bone, we readily recognize the great indebtedness of surgery to her powerful aid; but when in consequence of this a surgeon proposes to amputate a limb that is perfect except in the flexibility of the bone at the seat of injury, we cannot but notice the imperfect character of his art.

Under the most hopeless circumstances of ununited fracture, it should therefore be borne in mind that the restoration of the integrity of the lever upon which the muscles act will enable them to perform their function, and thus save the patient from becoming a cripple for life.

A simple means of affording the necessary support to a bone under these circumstances will be found in this and a previous paper. These means are but a slight modification of those which have been long employed in the bending of bones, resulting from mollities, &c., but their application to cases of pseudarthrosis generally will also be found to prove most valuable.

In No. XXIX., New Series of this Journal (Jan. 1848), I reported a case of false joint in the leg, in which the patient, after vainly suffering the application of caustic to the ends of the bones, and subsequently their resection, was enabled to walk without difficulty by means of the splint there described. Suggestions were also offered as to the utility of somewhat similar means in the case of false joints in the upper extremity. I, however, feared at that time that pseudarthrosis in the femur would prove an exception to the general utility of the means recommended. Such I am now happy to say has not been the case in the instance in which it has been tried, and it is now reported in the hope that surgeons may be induced to try it, before resorting to amputation in cases where possibly a useful limb may be gained.

Since the report of Jan. 1848, the patient, Mrs. K., has constantly worn the splint, and found it to answer better than several others, which were tried in the hope of improving on the original. The main part of her weight (about 160 lbs.) being sustained by the straps at the knee, and the fracture strengthened by pressure all round it, she is now (Dec. 1850), although labouring under a false joint in both bones of the leg to a degree which permits considerable flexion and extension directly in the middle of the tibia, able to walk without attracting the attention of ordinary observers.

The success attending the use of the splints in another instance of a similar injury has also been most gratifying. This patient, Mr. S., weighing near 200 lbs., received a fracture of the leg in December 1849, for which he was skilfully treated by a distinguished practitioner of this city. Union, however, did not occur, and after labouring under false joint for three months, he was directed to Mr. Rohrer (the cutler who manufactured my first splint) for an apparatus.

Being furnished with one similar to that of Mrs. K., he was soon enabled to walk, and, under the judicious treatment of his physician, such a degree of inflammation was induced in the bone as resulted in its consolidation. Although he can now bear his weight upon the limb, he yet wears the splints to guard against accidents.

Impressed with the result of these cases, I embraced the opportunity presented to me last April of testing the applicability of similar means to the treatment of pseudarthrosis in the femur, modifying them only so far as the structure concerned rendered necessary.

The Hon. Judge G—, of Ohio, received an oblique fracture a little above the middle of his right femur, in the winter of 1848, which, though treated in the usual manner, never united. In April, 1850, he therefore determined to visit this city, and placed himself in the hands of Dr. Wm. E. Horner, of the University of Pennsylvania, with whom I saw him. He was then upwards of sixty-three years of age; in rather feeble health; with an oblique ununited fracture, which permitted free motion of the middle of the shaft of the femur in every direction, and was incapable of sustaining his weight, being unable to move without crutches.

After fully considering the peculiar circumstances of this case, it was decided not to recommend an operation, but rather to try what the splints might be able to do towards relieving him.

Accordingly, on explaining to Mr. Rohrer my views of the case, and the proper modification of the apparatus that would be required in this patient, I had the satisfaction of finding that he could accomplish it. After some trifling alterations which experience demanded, the Judge found himself once more able to walk with great freedom, very much to his satisfaction, as he had been assured by several surgeons whom he consulted that amputation would be his only resort.

The splints are shown in the figures.

Fig. 1 exhibits a three-quarter view of the apparatus.

A.—A band and belt to go round the pelvis.

B.—A padded crutch-head to support the weight of the body upon the perineum, as in Boyer's splints for fracture of the femur. As he gained confidence, this piece was subsequently removed.

C.—A support to the back of the thigh. The splint which allowed the support to the front of the fracture is seen on the thigh in figure 3; it was formed of sheet-iron, moulded to the limb and well padded.

D.—Another support just above the condyles. The front splint, figure 3, came down in front as low as this piece.

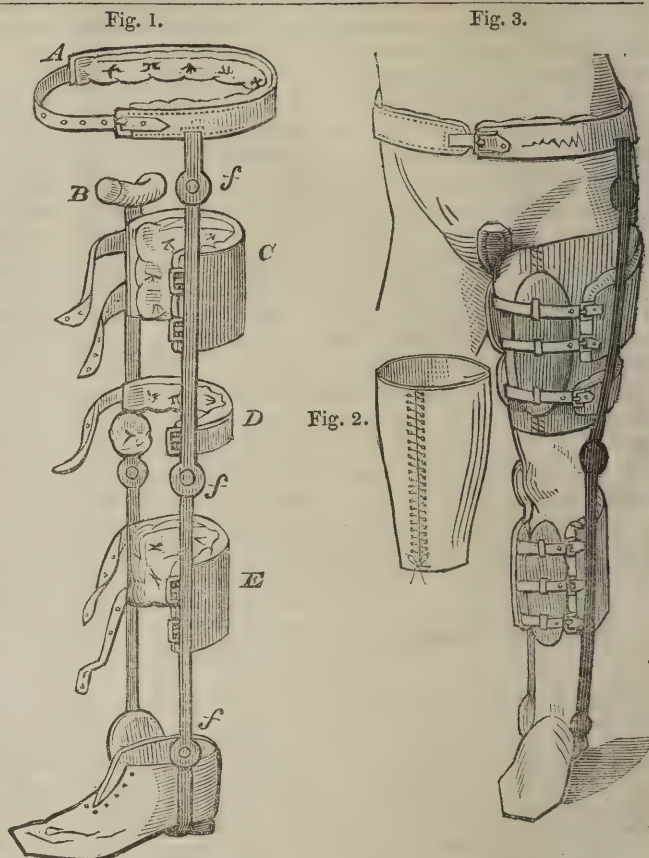
E.—A support to the back of the leg, where the broad straps in front were buckled. This kept the leg directly in the line of the femur.

f, f, f were joints in the side steel splints, to favour the motion at the ankle, knee, and hip-joint. They were so arranged by a "half-stop" as to prevent sudden or excessive flexion.

Fig. 2 is a buckskin thigh piece, which laced up in front and extended from the groin to the knee, to protect the skin from chafing.

Fig. 3 shows a three-quarter view of the apparatus as applied. With this the Judge is now able to walk without his stick, though generally using it, from the force of habit; and in a recent message to Mr. Rohrer, in connexion with some slight repairs, declared himself unwilling to part with it for the best farm in Ohio.

To the mechanical skill of Mr. Rohrer, he is certainly indebted for the lightness and strength of his semi-artificial limb.—*American Journal of Medical Sciences*, 1851.



CLXXIV.—RECENT CONTRIBUTIONS TO THE THEORY OF DIGESTION.—Lehmann has instituted numerous experiments with the view of settling the questions; 1. What numerical relations of the digestion-ferment (*verdauungsferment*), the free acid and the water, are the most favourable for converting the largest possible quantity of a nitrogenous substance (albumen, gelatine, &c.) into its corresponding peptone? 2. Do the different organic or inorganic acids substituted for the acid of the gastric juice, act in accordance with their chemical equivalents, or is their action modified by other conditions? and, 3. What is the numerical relation existing among the different albuminous or gelatinous substances, in reference to their solubility by the gastric juice?

We will not attempt to follow in detail the very comprehensive series of experiments instituted by Lehmann with artificial digestive mixtures of various composition, but referring our readers to his able work, we will give a few of the general conclusions he has deduced from his inquiries. The same quantities of pepsin and hydrochloric acid will, with a larger quantity of water, convert more nutrient matter into peptone; the digestive action of a digestive mixture may be sensibly increased when a larger quantity of water and hydrochloric acid are added to the pepsin. When alkaline salts are added in any quantity to the gastric juice, and not rapidly removed again, as occurs in natural digestion, the digestive power of the gastric juice may be considerably diminished or wholly removed. It is probable, that in digestion, equivalent quantities of hydrochloric and of lactic acid, may replace each other; acetic or phosphoric acid possesses a far less considerable digestive power than hydrochloric or lactic acid.

Heintz has found that the acid gastric fluid vomited by a woman suffering from dyspepsia, contained lactic acid of the ordinary modification (as formed from sugar), and not as exhibited from muscular flesh (paralactic acid). The lactate of zinc yielded by it contained 3 at. water of crystallization.

Bernard, who has investigated the pancreatic juice, is of opinion, that this is the only one of the intestinal fluids exclusively designed to modify or digest the neutral fats contained in the food, and thus by some special method, render them capable of being absorbed by the lacteals. The pancreatic fluid possesses, moreover, the property of instantly and perfectly forming an

emulsion with neutral fats out of the animal organism, and decomposing them into fatty acids and glycerine.

Bernard's results have been confirmed by Magendie, Milne Edwards, and Dumas; but contested by Frerichs, at least, in reference to the action of the pancreatic fluid. He is of opinion, that the purpose of the pancreatic fluid is to effect the metamorphosis of amylaceous nutrient substances into sugar within the intestinal canal, to accelerate the decomposition of the bile into insoluble products, and in concert with the bile and the intestinal fluid, to promote the distribution of the neutral fats. The pancreatic fluid was found to form an emulsion with olive oil; but a similar property was exhibited in nearly the same degree by the serum of the blood, by bile, and saliva.

Frerichs also examined the intestinal fluid. He found it had a glass-like transparency, was colourless and tough; it would not divide easily in water, and was only in a slight degree soluble. The filtrate exhibited only a faint opal appearance under the action of heat. In 1,000 parts of intestinal fluid from the colon of cats and dogs, he found 950.55 water, and 24.45 solid constituents; in the latter he also found 8.70 insoluble mucus, with cell-nuclei and cells, 5.40 soluble mucus and extractive matter, 1.95 fat, 8.40 chloride of potassium, phosphorus and sulphur, alkalies and phosphates. In the small intestines, the quantity of the solid constituents (all other relations being the same) are 26.5 in 1,000 parts.—*Liebig and Kopp's Jahresbericht der Chemie*, 1850.

CLXXV.—ON THE STATE OF THE SPINAL CORD IN HEMIPLEGIA. By D. I. TURCK.—Dr. Turck found in the *post-mortem* examination of three persons, who had been affected with paralysis of the left side, the following pathological processes in the brain, as the proximate causes of the hemiplegia. The first case exhibited an obsolete centre of inflammation in the right corpus striatum and optic thalamus, together with white degeneration of the latter, extending deeply into the substance of the crus cerebri. In the second case, there was an old apoplectic cyst in the same region, also accompanied with white softening of the optic thalamus and crus cerebri; and in the third case there was likewise an old encephalitic cyst in the substance of the right corpus striatum and optic thalamus. On examining the spinal cord under the microscope, the substance on the left side corresponding to the parts

paralysed, it was found, notwithstanding its apparent normal condition, to contain an innumerable quantity of granular cells (inflammatory globules), imbedded, with tolerable regularity, throughout the whole course of this left half of the spinal cord. Such, at any rate, was its histological appearance in the two first cases; while in the third case, the granular cells were only crowded together at points corresponding to the origin of the *plexus brach.* and *lumb.*, occurring but scantily in the other portions. The right side of the spinal cord was almost wholly free from granular cells in all three cases. Dr. Turck is of opinion that the genesis of this special process of exudation may possibly be explained in a two-fold manner, either by topical distribution from the crus cerebri, in a downward direction, or secondarily, as a consequence of the continued palsy, induced by the cerebral disease. The first mode of explanation seems inadequate to account for the strict limitation of the granular cells to one side; and it would rather lead us to expect that the process would extend to the opposite side, at the point of interlacement of the fibres. The latter view is especially confirmed by the third case, where the alteration under consideration was especially developed at those parts of the spinal cord which correspond to the origins of the nerves of the paralysed extremities. As sensibility was but slightly disturbed, although there was excessive motor paralysis in all three cases, the former view requires the assumption of the inflammatory process, being deduced from the paralysis of motor elements (perhaps the vaso-motor nerves). It should be observed, however, that Dr. Turck did not invariably discover these alterations of the spinal cord in hemiplegic subjects.—*Wien. Ztschr.*, 1850.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

(From the Registrar-General's Report).

The return for the week ending last Saturday exhibits an unfavourable state of health amongst the population of the Metropolitan districts. It was formerly shown that the mortality rose in the third week of February to 1,213 deaths, and slightly declined in the subsequent week, when the number was 1,148; but it is found that the deaths registered last week amount to 1,247. Taking the ten corresponding weeks of 1841-50 for comparison, no example occurs in the series of so great a mortality; the highest return (in the tenth week of 1845) having been 1,141, whilst the average did not exceed 1,001 deaths. This average, with a correction for the assumed rate of increase of population, is 1,092; on which the 1,247 deaths returned for last week show an excess of 155.

Last week, 570 children died under 15 years of age, whilst the recorded average is only 478; 374 persons died at 15 years and under 60, while the average is 361; and 302 persons of 60 years and upwards died, though the average is only 252. Hence it appears that the young and persons in advanced life are now the principal sufferers.

The excess both on the previous week and on the average is principally due to diseases which affect the organs of respiration. Hooping-cough carried off 70 children, considerably more than usual at this period; bronchitis 160 persons of various ages, but principally amongst the old, though the greatest number in any corresponding week was not more than 95; asthma 40 persons; laryngitis and laryngismus stridulus 8; croup 13; influenza, which is increasing, 15. Pneumonia, or inflammation of the lungs, was fatal in 96 cases, a great majority of which were among children; but the number attributed to this cause is not remarkable. Consumption destroyed 154 lives, which, with one exception, is a greater number than in any corresponding week.

The zymotic class, besides hooping-cough, croup, and influenza, already mentioned, comprises small-pox and measles, both of which are now more fatal than usual; also scarlatina, typhus, and other complaints, which discover no remarkable results. Two cases of cholera are recorded, of which the following are the particulars:—

At 11, Douglas Gardens, in St. John, Westminster, on 6th March, the son of a journeyman painter, aged 6 years, died of "sporadic cholera (2 days' illness)." And at 9, Anchor-yard, City-road, on 1st March, the wife of a general dealer, aged 53 years, "bilious cholera (2 days), low fever (4 days)."

With reference to 26 cases, in which small-pox proved fatal, it is recorded only in three, those of females aged respectively 7 months, 12 years, and 24 years, that vaccination had been performed at some previous time. The daughter of a carpenter, aged 12 years, died on the 1st March, at 26, Emma-street, Hackney-road, of "confluent small-pox (26 days);" and Mr. Murray reports that this is the third death from the disease which has occurred within a month in the same house; and that the house is situated before a stagnant pond.

On the 2nd of March, at 2, Hemingford-terrace, Islington, a gentleman died of bronchitis and natural decay, who is stated to have arrived at the extraordinary age of 106 years, and to have enjoyed possession of his faculties till the last.

The births of 1,580 children (of whom 795 were boys and 785 girls) were registered in the week. The average of six corresponding weeks in 1845-50 was 1,412.

In sub-district of St. George, Bloomsbury, at 22, Kenton-street, on 1st March, a comb-maker, aged 51 years, died of "phthisis (about 18 months)." The medical attendant adds on his certificate, that "the drainage of the house is very much complained of by the persons who occupy it, among whom there has been a great deal of illness."

In Gray's-inn-lane, at 4, Pheasant-court, on 2nd March, the daughter of a labourer, aged 7 months, died of "bronchitis (1 week)." Mr. Holmes describes this court "as very close and over-crowded with Irish families and tramps." He adds, that several families live and sleep in one room; and that four deaths have occurred there last week, three amongst children from bronchitis, and one, that of a labourer's wife, from chronic affection of the lungs.

STATISTICS OF SUICIDE IN PARIS.

An examination of 9,000 official reports relative to suicides which have been committed in Paris, during a period of 34 years, affords the following results:—1. The philosophical or premeditated suicide takes place at night and a little before dawn; the accidental suicide occurs during the day, that being the period when its occasional causes are developed, such as bad news, losses, &c. Each age has its peculiar method of terminating life. Young men and those in the prime of life generally have recourse to firearms; children, women, and old men, most commonly destroy themselves by hanging or suffocation. The following table, which has been carefully drawn up, shows the methods of suicide most generally resorted to at the various periods of life:—

	By firearms.	By hanging and suffocation.
From 10 to 20	61	68
20 to 30	283	51
30 to 40	182	94
40 to 60	161	256
60 to 70	126	235
70 to 80	35	108
80 to 90	2	1

The average number of suicides annually committed in Paris, is 300. It has been established by authentic documents, collected by the Prefecture of the Seine, that of 511 ascertained suicides, 65 have been by means of voluntary falls from great heights, 66 by strangulation, 45 by pointed and cutting instruments, 48 by firearms, 31 by poison, 86 by asphyxia from charcoal vapour, 170 by drowning. The causes leading to the act are distributed as follow:—100 from love or wounded affections; 148 from disease, disgust of life, &c.; 69 from an evil course of life, loss at play; 100 from distress, loss of employment, embarrassed affairs; 94 from unknown motives.—*Journal des Débats*.

APOTHECARIES'-HALL.

Names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 6:—Mr. Richard Driver Kidd, Godalming, Surrey; Mr. William Dewsnap; Mr. Ebenezer Moore, London; Mr. John Carruthers, Dumfries.

NAVAL APPOINTMENTS.

Surgeons.—Alfred Baker Cutfield (1840), to the Penelope; John A. Mould (1838), to the Ceylon receiving-ship, at Malta.

Assistant-Surgeons.—Michael Walling (1846), to the Penelope; John T. Robinson, M.D. (1845), additional of the Hastings, 72, flag-ship, on the East Indies station, to the Rhadamanthus steam troop-ship, at Sheerness; James W. Elliott (1848), formerly of the Oberon steam-vessel, to the Prince Regent, 90, at Portsmouth.

Messrs. Cook and Williams, of Princes-street, Regent-street, have lately invented a Respirator which has the additional advantage of being also a Chest Protector. It is a very simple contrivance, and anything but unsightly, an objection which has been so frequently urged against the cumbersome machine of Mr. Jeffrey. For ladies, in particular, it is the best thing of the kind we are acquainted with.

Dr. Casper, the medical councillor who drew up the report on the insanity of Sefeloge, after his attempt on the life of the King of Prussia, has published, in a medical periodical, a complaint of the scandalous abuse the German Universities make of their privilege of granting the degree of Doctor of Medicine. The facility with which the title is conferred on the most ignorant and inefficient persons is rapidly destroying the reputation of the German Medical Schools abroad. Dr. Casper states, on the authority of a physician in Rio de Janeiro, that in South America medicine is practised by horse-dealers, journeymen tailors, wandering equestrians, and others who have purchased the doctor's diploma in the German Universities; these instances are taken from Brazil alone. In Brazil itself the title is only conferred after proper examination, and the conferring the degree is a solemn act, at which the emperor is almost always present in person.

MEDICO-METEOROLOGICAL TABLE FOR THE WEEK ENDING MARCH 8, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Station of the Barometer above Level of the Sea.	TEMPERATURE OF AIR.					Mean elastic force of Vapour.	TEMPERATURE OF VAPOUR.					Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean (saturation = 1).	Mean weight of a cubic foot of Air.	Mean amount of Cloud. 0-10.	AUTHORITIES AND NAMES OF OBSERVERS.			
				Highest.	Lowest.	Range in the Week.	Mean of all the Highest.	Mean of all the Lowest.		Mean Daily Range.	Mean.	Evaporation.	Dew Point.	GR.							GR.	GR.	
Jersey.....	49° 11'	2° 6' W.	75	30.050	30.360	29.817	0.543	0.229	53.0	34.0	19.0	49.1	38.6	10.5	43.2	40.1	35.9	2.66	0.77	0.774	547.7	6.9	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey.....	49° 33'	2° 40' W.	123	29.835	30.307	29.686	0.621	0.252	49.0	37.5	11.5	46.4	40.0	6.4	41.9	40.5	38.6	2.93	0.35	0.892	547.8	6.4	Dr. Hoskins, F.R.S., M.B.M.S.
Truro.....	50° 17'	5° 4' W.	55	30.124	30.457	29.794	0.693	0.243	54.0	29.0	25.0	49.4	36.6	12.8	42.9	40.7	37.7	2.83	0.37	0.885	551.2	7.6	Dr. Barham.
Exeter.....	50° 45'	3° 41' W.	140	29.945	30.319	29.624	0.695	0.221	52.0	29.5	22.5	48.6	34.9	13.7	42.0	38.3	34.7	2.56	0.61	0.814	550.3	4.4	Dr. Shaper, M.B.M.S.
Southampton.....	50° 54'	1° 24' W.	60	29.974	30.316	29.721	0.595	0.203	50.2	32.0	18.2	45.9	33.6	12.3	38.7	36.2	32.5	2.38	0.57	0.805	553.4	7.0	J. Drew, Esq., F.R.A.S., M.B.M.S.
Uckfield.....	50° 59'	0° 5' E.	180	29.957	30.327	29.586	0.572	0.211	52.0	28.0	24.0	46.3	33.0	13.3	38.5	36.5	33.6	2.48	0.47	0.841	551.5	6.8	C. L. Prince, Esq., F.R.C.S., M.B.M.S.
Greenwich.....	51° 28'	0° 1' W.	160	29.980	30.370	29.530	0.740	0.208	50.8	32.2	18.6	46.7	34.5	12.1	39.3	36.7	32.6	2.42	0.60	0.806	551.2	—	From Reg-Gen. Report, H. Gordon, Esq.
Lewisham.....	51° 28'	0° 1'	78	29.984	30.369	29.620	0.749	0.212	51.8	30.6	21.2	47.1	34.0	13.1	39.3	37.0	33.7	2.47	0.55	0.819	552.4	8.5	G. Leach, Esq., F.Z.S., M.B.M.S.
St. John's Wood.....	51° 32'	0° 1' W.	150	29.988	30.367	29.619	0.618	0.203	53.0	29.5	23.5	47.1	31.7	15.4	38.1	35.9	32.6	2.38	0.52	0.820	552.8	9.8	M. J. Johnson, Esq., F.R.A.S.
Radcliff Observatory.....	51° 45'	1° 15' W.	210	29.937	30.239	29.521	0.718	0.200	52.1	26.5	25.6	46.9	31.9	15.0	39.6	36.5	32.0	2.33	0.72	0.770	549.9	8.4	Dr. Lee, F.R.S., Treas. B.M.S.
Hartwell.....	51° 49'	0° 31' W.	250	29.751	30.126	29.477	0.649	0.228	55.0	28.0	27.0	48.0	31.7	16.3	38.5	37.4	35.8	2.67	0.27	0.900	549.3	7.3	S. C. Whitbread, Esq., F.R.A.S., Pres. B.M.S.
Cardington.....	52° 7'	0° 25' W.	100	29.937	30.334	29.557	0.777	0.194	49.5	30.5	19.0	45.4	31.5	13.9	38.1	35.4	31.4	2.28	0.63	0.785	553.4	8.4	W. Brooke, Esq., F.R.A.S., M.B.M.S.
Nottingham.....	52° 37'	1° 46' E.	39	29.850	—	29.631	—	0.209	50.0	31.0	19.0	47.1	33.0	14.1	39.3	36.9	33.4	2.45	0.57	0.816	550.2	7.7	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.
Nottingham.....	52° 58'	1° 40' W.	203	29.867	30.256	29.557	0.689	0.195	53.5	27.5	26.0	48.9	30.8	18.1	37.5	35.1	31.5	2.31	0.53	0.809	552.7	6.4	J. W. Jeans, Esq., F.R.A.S., M.B.M.S.
Grantham.....	52° 55'	0° 39' W.	190	29.834	30.239	29.520	0.719	0.208	48.5	29.3	19.2	45.2	33.1	12.1	38.4	36.3	33.2	2.44	0.49	0.834	551.2	9.0	Dr. Moffatt, F.R.A.S., M.B.M.S.
Hawarden.....	53°	3° 0' W.	260	29.764	30.212	29.448	0.764	0.210	50.1	29.5	20.6	47.0	34.0	13.0	39.9	37.3	35.6	2.46	0.63	0.800	548.0	5.3	John Hartnup, Esq., F.R.A.S.
Liverpool Observatory.....	53° 25'	3° 6' W.	37	30.004	30.479	29.640	0.839	0.219	49.2	34.2	15.0	46.2	37.7	8.5	40.6	38.1	34.5	2.54	0.61	0.810	552.3	6.7	G. V. Vernon, Esq., M.B.M.S.
Manchester.....	53° 29'	2° 16' W.	144	29.959	30.361	29.605	0.756	0.216	50.0	27.0	23.0	47.5	33.3	14.2	39.1	37.1	34.2	2.52	0.	0.841	552.6	8.0	W. R. Milner, Esq., M.B.M.S.
Wakefield.....	53° 41'	1° 30' W.	115	29.889	30.320	29.554	0.666	0.179	54.0	27.0	27.0	49.4	32.2	17.2	40.3	36.5	31.8	2.30	0.82	0.741	550.1	8.0	Rev. A. Weld, F.R.A.S., M.B.M.S.
Stonyhurst.....	53° 51'	2° 28' W.	381	29.605	30.037	29.285	0.752	0.194	49.7	24.3	25.4	46.7	31.9	14.8	38.7	35.7	31.2	2.28	0.67	0.768	546.6	7.0	J. F. Miller, Esq., F.R.S., M.B.M.S.
Whitehaven.....	54° 33'	3° 25' W.	90	29.890	30.380	29.557	0.825	0.242	50.0	30.5	19.5	46.2	36.6	9.6	40.1	38.0	37.5	2.83	0.27	0.914	550.2	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.
Glasgow.....	55° 51'	4° 18' W.	121	29.872	30.387	29.549	0.818	0.223	48.7	29.5	19.5	46.1	35.1	11.0	40.4	38.2	35.0	2.59	0.54	0.881	549.4	—	David Tennant, Esq., M.B.M.S.
Dunino.....	56° 16'	2° 49' W.	250	29.633	30.100	29.270	0.830	0.214	51.0	28.0	23.0	46.3	32.1	14.2	38.7	36.8	34.0	2.51	0.45	0.849	547.0	2.5	† At Liverpool.

The observer at Jersey says, I must refer for the position of my thermometers to the note in 'THE INSURANCE' of February 15th. The stand is placed upon a small grass-plot, and elevated four feet from the ground; there are neither walls nor other matters which can influence them by reflecting the sun's rays; nothing but the rising ground of the garden to the westward, which I have mentioned; radiation is prevented by the projecting roof of the stand. The instruments consist of a very excellent standard thermometer, by Troughton Buns, to which the readings of the others are constantly referred. A Six's and a Rutherford's registering thermometer, by the same makers. A wet and dry bulb thermometer, by Squire, Oxford-street; a minimum thermometer divided on the tube, by Barrow, Oxenden-street; and one or two others, for readings in different aspects. I wish you would extend your inquiries as to position especially, to all the other observers.

The highest readings of the thermometer in air were 53° at Hartwell, 54° at Truro and Wakefield, and 53° at Nottingham.

The lowest readings were 24° at Stonyhurst, 26° at Radcliff Observatory, and 27° at Manchester and Wakefield.

The least daily ranges of temperature took place at Guernsey, 8°; at Liverpool, Observatory, 8°; and at Whitehaven, 9°; their mean value is 8°; and the greatest occurred at Nottingham, 18°; at Wakefield, 17°; and at Hartwell, 16°; and their mean value is 17°.

WEEKLY MEDICO-METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of Readings of the Thermometer.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Air.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity of Air.	Mean weight of a cubic foot of Air.	Mean amount of Cloud.	WIND. General Direction.	Average Strength.	Average number of days it fell.	Average fall.	Mean amount of Cloud.	AUTHORITIES AND NAMES OF OBSERVERS.
Truro and Exeter.....	98	50° 31'	30.035	0.282	29.3	28.7	28.7	49.0	35.5	13.2	39.5	36.2	35.9	2.70	0.59	0.825	550.8	6.0	ESE & NNE.	0.9	3	in.	0.275	Rev. S. King, F.R.A.S., M.B.M.S.
Southampton to Hartwell.....	155	51° 25'	29.884	0.269	29.1	28.5	29.6	46.8	32.9	13.9	38.9	36.6	36.2	2.45	0.53	0.824	551.5	8.0	WSW & NNW.	1.0	2	0.110	0.110	Dr. Hoskins, F.R.S., M.B.M.S.
Cardington to Hawarden.....	168	52° 46'	29.850	0.263	29.3	28.7	29.6	46.7	32.5	14.2	38.6	36.3	36.0	2.39	0.57	0.809	551.1	7.4	WSW.	0.9	2	0.118	0.118	Dr. Barham.
Manchester to Stonyhurst.....	213	53° 40'	29.818	0.196	29.1	28.1	25.1	47.9	32.5	15.4	39.4	36.6	36.2	2.37	0.66	0.783	549.7	7.7	WSW.	1.5	2	0.210	0.210	J. Drew, Esq., F.R.A.S., M.B.M.S.
Liverpool and Whitehaven.....	64	53° 59'	29.852	0.231	29.3	28.4	17.2	46.2	37.2	9.0	40.4	38.5	38.0	2.69	0.44	0.862	551.3	6.7	WSW.	1.5	2	0.210	0.210	C. L. Prince, Esq., F.R.C.S., M.B.M.S.
Glasgow and Dunino.....	186	56° 4	29.753	0.219	28.6	28.6	21.3	46.2	33.6	12.6	39.6	37.5	37.5	2.55	0.50	0.840	548.2	12.5	WSW & WSW.	..	1	0.005	0.005	From Reg-Gen. Report, H. Gordon, Esq.

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

* At Liverpool. † At Dunino.

The observer at GUERNSEY says that the self-registering, as well as the dry and wet-fall thermometer, are grouped closely together, about four feet above the ground, under a shed built on purpose, in a small garden. Their aspect is N.E.—the nearest object being a dark blue granite wall, 30 feet distant, and about 10 feet high. A higher wall forms the western, and a house front the eastern side of the otherwise open space in which they are situated. The thermometers are perfectly protected from radiation and reflection by an open trellis on each side of the pent house.

Observations made in a different locality for about five years, confirm the results published—they are corroborated by the testimony of careful observers in other parts of Guernsey, which will be transmitted next week.

The statement made by the Jersey observer, as regards the ripening of melons in the open air in that island, is perfectly correct; it applies equally to Cherbourg and St. Servan—corroborates, rather than invalidates, the correctness of observations taken in Guernsey—confirms the opinion that the climate of Jersey is more continental than insular—and *proves the reverse of what was intended* by the Jersey observer.

The ripening of fruit depends more upon high summer and autumn heat—more upon “the squares of the degrees of temperature,” than on the mean temperature of the locality.* Hence, Jersey, situated south of Guernsey, having a declination towards that point of the compass, would naturally possess a higher and more enduring summer and autumn temperature—which appears to be the case from the observations recorded.

The small mean daily range in Guernsey was not ascertained until comparison pointed it out. The observer has, therefore, no preconceived notion, no favourite theory to support. His object is the desire to observe and record such facts as come under his notice.

Names of Stations.	MARCH.							RAIN.		
	2	3	4	5	6	7	8	Fall in the week	Fall from 1st Jan.	No. of days it fell Jan. 1.
Jersey	N. ...	S.W. ..	W. 0.04	S.E. 0.15	N.W. 0.16	N.W. ...	E. ...	in. 0.350	in. 5.130	29
Guernsey	N.W. ...	W. ..	... 0.085	W. S.W.	N.W. ...	N.W. ...	N.E. ...	0.305	6.628	31
	E.N.E.	...	...	...	...	N. ...	S.E. ...			
Truro .....	... ..	... 0.060	... 0.031	... ..	... ..	... ..	0.010	0.480	11.138	40
	N. ...	N. ...	W. S.W.	N. ...	N.E. ...	S.E. ...	...		
Exeter .....	... ..	0.010	0.030	0.030	...	...	...	0.070	4.680	37
	N. ...	N. ...	W. S.W.	N. ...	N. ...	S.S.E.	...			
Southampton ...	... ..	... ..	... 0.027	... 0.012	...	...	...	0.039	6.709	...
	N.E. ...	N.E. ...	W. S.W.	N.W. ...	N. ...	N.W. ...	...		
Uckfield .....	... ..	... ..	... 0.07	...	...	...	...	0.070	5.430	28
	...	N.W. ...	W.N.W.	W.S.W.	N. ...	NN.W.	S.S.E.			
Lewisham	0.007	... ..	W. S.W.	W. ...	... 0.082	...	...	0.089	4.029	33
	N. ...	W.S.W.	W. S.W.	N. ...	N. ...	N. ...	...		
Greenwich .....	... ..	... ..	... 0.10	...	...	...	...	0.100	3.424	30
	N.N.W.	W.S.W.	N. W.S.W.	N.W.	N.W.	N.W.	N.E.			
St. John's Wood ..	... ..	N.W. ...	W.S.W.	0.120	...	...	...	0.120	4.516	27
	N.N.E.	S.W. S.W.	S. ...	...	NN.W.	W.S.W.	S. ...			
Radcliff Obs. ....	... ..	N.W. ...	S.W. ...	0.182	...	...	...	0.180	...	...
	...	N.W. ...	S.W. ...	...	S.W. ...	S.W. ...	N.E.			
Hartwell .....	... ..	... ..	... 0.096	... 0.074	...	...	...	0.170	3.515	23
	N.N.E.	W.N.W.	W. W.S.W.	N.W.	NN.W.	S.S.W.	...			
Cardington .....	... ..	... 0.070	0.056	...	...	...	...	0.125	2.690	24
	... ..	W. ...	S.W. ...	N.W. ...	N.W. ...	S.E. ...	...		
Norwich .....	... ..	... ..	... 0.03	0.09	0.09	...	...	0.210	3.120	34
	N.N.W.	W.N.W.	W. S.W.	N.W.	NN.W.	S. ...	...		
Grantham .....	... ..	... ..	... N.E.	0.07	S. ...	...	...	0.070	2.325	27
	N. ...	W.N.W.	N.W. ...	N.W. ...	N.W. ...	S. ...	...		
Nottingham .....	... ..	N.N.E.	S.W. ...	0.064	...	...	...	0.064	2.680	32
	N.W. ...	N.W. ...	W.S.W.	N.W.	NN.W.	S.W.	S. ...			
Hawarden .....	... ..	... ..	... 0.100	...	...	...	...	0.100	4.200	23
	N.W. ...	N.N.W.	W. S.S.E.	NN.W.	N.E. ...	S.S.E.	...			
Liverpool Obs. ....	... ..	... ..	... 0.12	...	...	...	...	0.120	...	...
	N.W. ...	W. S.W.	W. N. ...	E. ...	S.W. ...	...	...	
Manchester	0 001	... ..	... 0.143	...	...	...	...	0.144	4.971	34
	N.N.W.	W. W.S.W.	W. NN.W.	VAR.	S. ...	...	...	
Wakefield .....	... ..	0.004	0.021	...	...	...	...	0.025	2.443	37
	N.E. ...	W. S.W.	N.W. ...	N.W. ...	S.E. ...	S. ...	...		
Stonyhurst	S.W. ...	N.W. ...	... 0.185	...	...	...	...	0.185	9.845	37
	W. ...	W.S.W.	S.W. ...	N.W. ...	S.W. ...	S. ...	...		
Whitehaven	N.W. ...	... ..	0.006	0.294	...	...	...	0.300	13.487	42
	S.W. ...	S.W. ...	S.W. ...	W.N.W.	S.S.W.	S. ...	...		
Glasgow .....	... ..	... ..	... ..	...	...	...	...	...	9.370	38
	N.W. ...	W. S.W.	N.W. ...	N.W. ...	N.W. ...	S.W. ...	...		
Dunino .....	... ..	... ..	... ..	0.010	...	...	...	0.010	3.910	24

At JERSEY, the little rain that has fallen this week was much wanted, and more would be acceptable; the cold winds have somewhat arrested the progress of vegetation, which is, however, still unusually forward; the thermometer on the grass was at 32 deg. on the 2nd, 4th, and 7th.

At GUERNSEY, on 2nd March, sunshine and clouds; P.M., wind N.E.; evening, wind S.W. 3rd, A.M., haze, calm, fine; P.M., sunshine and clouds, light breeze. 5th, overcast, misty, fresh breeze; evening, rain. 6th, A.M., fresh breeze; P.M., clear. 7th, sunshine and clouds, light breeze. 8th, A.M., gloomy, fresh breeze; P.M., cloudy and sunshine, light breeze.

At TRURO, 2nd, A.M., frost, very fine day throughout, light wind, night fine, still. 3rd, A.M., early fog, later, cirro-stratus; P.M., showery, light wind, night fair, still. 4th, A.M., early fog, after eleven showery; P.M., fair, night, wet. 5th, A.M., early rainy, night fair, with a few showers; P.M., showery, wind freshening from N.W.; P.M., a few drops of rain, night, fair. 7th, A.M., generally cloudy, with a few drops of rain; P.M. and night similar. 8th, A.M., early fine; after half-past eight overcast, with gleams, and a few drops of rain, light wind.

At EXETER, the weather has been cold during the week; on the 6th and

7th, there was ice in an open dish; the sky has been sometimes bright and at others grey.

At SOUTHAMPTON, with the exception of the 5th, the weather has been fine during the week.

At UCKFIELD, 2nd, fine morning; slight frost; large cumuli and nimbi; a few flakes of snow, 2 A.M. 3rd and 4th, overcast. 5th, gloomy and damp day, with drizzling rain. 6th, clear morning; cold wind; overcast after 10 A.M. 7th, overcast day; snow showers in the morning. 8th, overcast throughout.

At LEWISHAM, on the 2nd, the sky was nearly cloudless till afternoon, and partially cloudy afterwards. On the 3rd, it was overcast. On the 4th, it was partially covered till 5 P.M., and overcast afterwards. On the 5th, it was overcast. On the 6th, generally clear till noon, and overcast afterwards. On the 7th, overcast; and on the 8th, overcast till 7 P.M., and partially clear afterwards. The reading of the barometer was 30.27 during the 2nd, decreased to 29.60 by the evening of the 6th, and increased to 30.00 by the end of the week.

At ST. JOHN'S WOOD, some snow fell on the 2nd; the 3rd was cold and dull; the morning of the 4th was frosty; rain on the 5th; sharp frost on the 6th; overcast on the 7th and 8th. The reading of a blackened bulb thermometer, placed on grass, exposed to the sky, has been below 32 deg. on every night since February 28. The lowest was 25 deg. on March 3rd, and the highest was 29.5 deg. on the 7th.

At HARTWELL, some snow on the 2nd; frost on the 3rd, and on the 4th; rain on the 5th; frost on the 6th; and mostly overcast on the 7th and 8th.

At CARDINGTON, the 2nd and 3rd were cloudy and cold; the 4th, hoar frost, with bright sunshine; 5th was cloudy with slight rain all day; the 6th, 7th and 8th were cloudy and cold. The lowest reading of a minimum thermometer on grass, during the week was 19.5 deg. On the 4th, the highest reading of a maximum thermometer, placed in the full rays of the sun on grass, during the week was, 94 deg. on the 4th.

At NORWICH, 3rd, thick mist in the morning; partially cloudy, A.M.; fair, P.M., and mist in the evening. 4th, mist in the morning; day partially cloudy. 5th, morning fair; rain both fore and afternoon. 6th, ground in the morning thinly covered with snow; the day windy, with frequent squalls of rain. 7th, light showers at intervals the whole day. 8th, partially cloudy.

At HAWARDEN, 2nd, wind N.W., cloud, cirrus, cumulus, and cirro-cumulus. 3rd, a few drops of rain; wind N.W.; cloud, cumulus and cirrus; decrease of barometer, and increase of maximum temperature. 4th, hoar frost, frost; wind W.S.W., cirrus, A.M.; rain and cumulus P.M.—rain. 5th, overcast, drizzle, greater part of the morning, wind N.W.; P.M., cumulus, cirrus, and cirro-stratus. 6th, wind N.W., cloud, cirro-cumulus and cumulo-stratus; increase of barometer, decrease of maximum temperature. 7th, frost, hoar frost, and haze; cirrus and cirro-cumulus cloud for day; wind S.W. 8th, wind S. cloud, cirro-cumulus and cirro-stratus.

At LIVERPOOL, the 2nd, A.M., clear and frosty; P.M., cirrus and light haze. 3rd, A.M., overcast, light rain; P.M., cirro-stratus and cumulus, clear from 6th to 9th, cloudy afterwards. 4th, A.M., dense fog and hoar frost, clear after 9th; P.M., cirro-stratus and scud. 5th, A.M., overcast, light rain; P.M., clear till 4.30, afterwards overcast and hazy. 6th, A.M., frosty, cirro-stratus, and light scud; P.M., cirro-cumulus, evening clear. 7th, A.M., hoar-frost, cirrus, cirro-cumulus and haze; P.M., cirro-cumulus, haze, and scud; solar halo at 3.30. 8th, A.M., cirrus, stratus, and haze; P.M., cirro-stratus, cirro-cumulus and haze.

At GRANTHAM, some snow fell on the 2nd; the 3rd was dull and hazy, a solar halo A.M.; fog on the 4th, a fine day; rain on the 5th; the 6th was overcast, some sleet in the evening; the 7th was mostly overcast, and the 8th was fine.

At STONYHURST, the 2nd, morning fine, afternoon cold, cloudy, fine red sunset. 3rd, slight drizzle at 8 A.M. (imperceptible in gauge); solar halo between 10 and 11. 4th, fog till 8 A.M., rest of morning very fine, afternoon cloudy. 5th, rain in night and drizzle till about 11 A.M.; afternoon very fine. 6th, fine, frosty, clouds scattered, evening very bright. 7th, very fine, hard frost, cloudy at noon, afternoon very fine and sunny. 8th, fine, very thick on horizon; evening cloudy.

At WHITEHAVEN, on 2nd March, light breeze, fine and sunny; evening, partially clear. 3rd, light breeze, gleams; evening, slight showers. 4th, light breeze; P.M., very slight showers. 5th, strong breeze, a fine and nearly cloudless western twilight, tinged with a pale green tint, followed by clouds and wind. 6th, strong breeze, very fine and cloudless, bright unclouded sky. 7th, moderate breeze, overcast.

At GLASGOW, the 5th was showery in the morning, but there was not sufficient rain to be measured in the gauge; foggy and frosty on the 7th, and the remainder of the week was, for the most part, fine.

At DUNINO, on 2nd March, A.M., cloudy open cold weather; solar halo, P.M. 3rd, A.M., cloudy and mild; P.M., partly cloudy. 4th, A.M., clear and serene; P.M., fine, the sky almost cloudless. 5th, A.M., slight shower in morning, fine after. 6th, A.M., clear, a gale; P.M., hard gale. 7th, A.M., calm, hoar frost; P.M., clear cirrus. 8th, A.M., clear; P.M., clear with dying scud.

At JERSEY, influenza very prevalent, but of a mild form, and every one almost, has either had, or got, or expects to have a cold.

At GUERNSEY, scarlatina on the decline; no other prevalent disease.

At TRURO, no epidemic prevails.

At EXETER, some cases of scarlatina, but of a very mild form, and with but little eruption.

At UCKFIELD, the prevalent diseases of the week have been influenza, scarlatina, hooping-cough, and diarrhoea.

At ST. JOHN'S WOOD, influenza in a rather severe form prevails to a considerable extent, as also rheumatic and catarrhal affections. Scarlet fever is decidedly on the decrease, but measles has again become very prevalent. Diarrhoea also continues.—J. H. ROBERTS.

At NORWICH, little or no variation in the type of disease from the last week—the city generally healthy.

At NOTTINGHAM, colds and measles are prevalent.

At GRANTHAM, measles, influenza, pneumonia, and bronchitis prevalent during the week, but not so much so as last week; three or four cases of measles fatal; one case of croup. A little hooping-cough, diarrhoea, mumps, and catarrh; two cases of ophthalmia, one of epilepsy, ditto apoplexy, dysentery, and scurvy; one case also of English cholera.

At HAWARDEN, 2nd, diarrhoea, three cases (children); pleurisy, one case. 3rd, influenza, one case with menorrhagia; neuralgia, two cases. 5th, paralysis, one case, and one of premature uterine action. 6th, hysteria, one. 8th, pneumonia, one (child). Cases of influenza and diarrhoea have been frequent during the week, in a mild form.—J. MOFFATT, M.D.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

* See Humboldt's Cosmos, vol 1, pp. 319-21, 462-64, and “Quetelet on Probabilities,” Trans. p. 172.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 12.

LONDON, SATURDAY, MARCH 22, 1851.

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1,458	Mrs. N. Hyde	20	400	284	684	71 0 0	3 11 0
5,610	Admiral Sir W. Sidney Smith ...	8	1,700	324	2,024	19 1 2	2 7 8
3,422	The late Duke of Argyll	14	5,000	1,453	6,453	29 1 2	2 1 6
3,604	The late Earl of Clarendon	13½	2,500	1,120	3,620	44 16 0	3 6 4
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756	George Jones, Esq.	21	5,000	3,754	8,754	75 1 7	3 11 6
1,915	Sir John S. Sebright, Bart.	25¾	5,000	3,980	8,980	79 12 0	3 1 10
1,120	Nicholas Doidge	28	100	126	226	126 0 0	4 10 0
1,010	Rev. F. W. Blomberg, D.D.	28	3,000	3,596	6,596	119 17 4	4 5 8
6,059	Rev. Richard Tillard	18¼	1,000	814	1,814	81 8 0	4 9 2
6,630	Ditto	16¾	1,000	773	1,773	77 6 0	4 12 2
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HENRY DESBOROUGH, SECRETARY.

ON THE APPLICATION OF GUTTA-PERCHA IN THE TREATMENT OF FRACTURES OF THE LIMBS.

AS PRACTISED

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*Cases Collected and Reported by Dr. Isidore Buys.**(Translated from the French.)*

THE report given by MM. Pelouze and Civiale, to the Academy of Medicine of Paris, on a communication of M. Cabirol, relative to a new fabrication of probes, bougies, &c., contains some interesting particulars on the origin of gutta-percha, and its introduction into Europe.

The tree, of which this substance is the juice, is found chiefly in the immense forests of the peninsular of Malacca, the island of Sumatra, &c., where it is known under the name of *niato*, but is more generally designated *perch*. It attains considerable height and prodigious bulk.

It was not until 1822 that gutta-percha attracted the attention of an English surgeon. The natives collected it by merely cutting the tree, and used it only as an excellent combustible. Its other properties, however, ere long became known; and in 1843, it was sent into America and Europe by Dr. Montgomery, or, according to some, by J. José d'Almerida, of Singapore.

In the raw state its appearance varies. Several species have been admitted, distinguished by the names of *gutta-girih*, *gutta-tuban*, *gutta-gettonia*, and *gutta-percha*; but this apparent diversity seems to arise from the various modes of extraction, the season at which it is procured, the age of the subjects which furnish it, and the mixture of heterogeneous matter.

Industry has not been slow to appropriate this new substance; and, by the help of improved methods of purification, and numerous experiments by means of chemical and physical agents, she has succeeded in giving proof of many of its essential qualities.

It is now found in commerce, in the form of rather thin sheets, rolled, but not adherent, and of different shades of brown. Its resistance to flexion is equal to that of horn or wood, but it will not break. It possesses the remarkable property of softening under the influence of heat, and, on exposure to cold, resuming its rigidity, at the same time preserving the form given it by the mould. Impermeable to liquids, it may be said to be indestructible, unless by fire; for with the exception of the volatile oils, of sulphuret of carbon, and of chloroform, which dissolve it, other chemical agents seem to act but slightly on it.

In 1847, M. André Uytterhoeven, senior Surgeon to the Hospital of St. Jean, at Brussels, made trial of it for the first time in Belgium, in the treatment of fractures. He had previously obtained, through the kindness of a learned professor at Liège, M. Chandelon, a solution of gutta percha in sulphuret of carbon, which he had used with success, especially in closing wounds of the joints. In reference to osseous lesions, it was but rational to suppose that a substance which, like gutta percha, could be so easily moulded to a limb with a slight degree of heat, and rapidly resume its consistence, still preserving its form, could not fail to be a powerful auxiliary in maintaining the fragments of bone in their normal position. The first attempts were not, however, exempt from difficulty, inseparable from carrying into practice a method of dressing, so different from that hitherto adopted. For instance, the mode of preparation most suitable for adapting it to its new purpose, had to be ascertained. The degree of softening necessary, was a matter of some nicety, and this experience alone could determine; for, although when too soft, the gutta percha could be easily moulded, the length of time which must elapse before its hardening, if applied in this state, would deprive it of a part of its essential property as a bandage, viz., that of immediately supporting the fragments of reduced bone. If, on the contrary, not sufficiently softened, it could not take the form of the limb, and would constitute at best but an ordinary splint. This is not all: the most important points in the treatment remained to be acquired. For example. What effect might be produced on the skin of the fractured limb by the permanent contact of this new substance, whether in simple, compound, or comminuted fracture, &c., &c.?

Thus much may be affirmed, that in all the numerous cases of fracture, whether of the upper or lower extremities, in which the surgeon of St. Jean has made trial of gutta percha, no un-

favourable result has ensued. On the contrary, in proportion as experience has assisted in facilitating and simplifying the manner of using it, the conviction of the benefits to be derived from it in certain complications, as well as the facility which it affords for fulfilling a multitude of special indications demanded in the various kinds of fracture, has become stronger.

Although it cannot be denied that this new method has already been of great service, it has not yet attained perfection. It may however be predicted, that as use consecrates the practice, new suggestions will be made as to its mode of application, which will perhaps enhance its value.

As we have already said, it is nearly three years since the treatment of fractures with gutta percha was introduced into the surgical wards of the Hospital of St. Jean. Generally, all the cases have been treated from the commencement to the union of the fracture, with dressings of this substance. They have been somewhat numerous, and some have presented complications sufficiently serious, for the examination of their treatment to serve as a ground of appreciation of the services which this new method is called upon to render to surgery. This review we will make with the impartiality which the importance of the subject demands, and we leave the facts to speak for themselves.

GENERAL METHOD OF DRESSING FRACTURES BY MEANS OF GUTTA PERCHA.

In order to prepare an apparatus, the gutta percha, either in sheets or fragments, is plunged into water approaching the boiling point; it may even be only from 70° to 80°: the steam also may be made available. After immersion for some minutes, the whole is sufficiently softened to be converted into a mass, malleable, and capable of extension in every direction. This soft mass is placed upon a level wooden table, or upon a marble slab, first wetted with cold water to prevent adhesion. It is then spread out and equalized by means of a damp wooden roller, until



it forms a sheet, more or less thick, according to the degree of resistance which it is desired to communicate to the bandage or splint about to be formed. The sheet thus prepared, is applied in the following manner:—Under the fractured limb, reduced and supported by two assistants, one of whom uses extension, and the other counter-extension, is placed a well and evenly stuffed cushion, on which the operator lays the softened material, and the two assistants, by lowering the limb simultaneously, bring it in contact with the gutta percha. The operator raises the sides with his hands, and completes the mould by a few turns of a bandage, which is taken away as soon as the solidification of the apparatus removes all fear of depression at any point. The mode of procedure, as may be supposed, varies but little, when, instead of a single shell, it is found desirable to employ a second. The two shells formed, they are fixed in their places by means of two or three rings, also made of gutta. For example, if for the leg, one is fixed to the knee in the form of a boot top, the second to the middle of the limb, and the third to the instep. In order to examine the limb, a spatula is passed between the points of union, or else they are cut through, an operation which should be effected without jerking. Experience has shown the necessity of some precautions not unimportant to the success of the method. If the gutta is applied in too soft a condition, as we have said, it is too long in hardening. This difficulty is obviated, and the proper degree of consistency given by the previous immersion of the sheet in cold water. When it is applied, the hardening is promoted, either by surrounding it with compresses soaked in cold water, by laying the limb on a bed of wet sand, by dipping the limb into cold water, or by complete suspension in it by means of cords attached to the shell. The adherence of the softened gutta to the skin and hair is easily prevented by covering the limb with cerate, or by placing cerated linen between it and the apparatus.

When the limb has been some time encased, the secretions of the skin, in consequence of the impermeability of the substance, become condensed on the surface in the form of caseous matter, causing irritation and itching. To prevent this, a piece of linen should be interposed, or openings should be contrived here and there, to allow the perspiration to escape. It is needless to add, that the continued contact of the gutta with the skin in no way affects its vitality. The trials made by M. Civiale and also those at the Hospital of St. Jean, of gutta catheters suffered

to remain in the urethra, sufficiently prove it to be innocuous. From our statements, some idea may be formed of the services which this newly discovered substance may be made to render to surgery.

How many traumatic lesions are there in which the chief curative means consist in keeping the parts in a state of complete immobility in a given position? Whether the object to be effected be extension, flexion, abduction, or adduction, what substance can be so well adapted to the purpose as that, which by a simple and rapid preparation, is at once ready to answer all requirements of dimension, solidity, form, and direction?

Proof has already been made of its efficacy in the cure of certain serious lesions of the hand, and especially of the fingers, as deep transverse wounds, division of the flexor or extensor tendons, whitlows, burns, &c. Applied with care it enables the surgeon at once to fix the parts, in whatever degree of flexion or extension he may judge necessary.

Regarding fractures of limbs in a surgical point of view generally, the employment of gutta percha must not be considered as an exclusive method: on the contrary, it adapts itself with equal facility to methods of treatment based on principles apparently irreconcilable in themselves, but nevertheless maintained and professed to this day by authorities equally deserving attention.

We will not here discuss the relative value of the methods known as demiflexion and extension, applied to the treatment of fractures of the lower extremities, but will confine ourselves to stating that the indications of both methods may be equally well fulfilled by the aid of the gutta percha apparatus.

Whoever has, for any length of time, practised surgery in a populous city, knows that not a few among the fractures which ordinarily come under his notice, require very slight apparatus to bring about consolidation. Occasionally the displacement of the bone and the contusion of the soft parts are scarcely discoverable. Contention, combined with a position favourable to repose, constitutes the sole expense of their treatment, and, in these cases, the employment of gutta percha proves a source of economy, which is a matter never to be despised in a charitable establishment. This substance, as we have already said, is unalterable. It loses nothing by the successive manipulations it may undergo, and, what especially augments its value, is the fact of its requiring no sacrifice of bandages. It also permits exercise at the proper time.

Some surgeons, pre-occupied with the influence of free circulation in the formation of callus, have gone so far as entirely to abandon all kinds of contrivances producing circular compression, in the treatment of fractures whether of the superior or inferior extremities. In their opinion whatever obstructs the circulation of the blood or lymph, is but an impediment to the regular work of nature. This doctrine has in our days a powerful advocate in one of the most distinguished surgeons of the hospital of St. Louis, at Paris, who, discarding every kind of circular bandage, reduces the fracture by extension and counter-extension, effected by cords attached to the two extremities of the bed, and fixed to the limbs by means of bracelets, care being taken to maintain the co-adaptation of the fractured extremities of the bones, throughout the course of treatment.

The gutta percha apparatus will, however, fulfil the views of less exclusive surgeons, who, although sensible of the consequences in certain cases of circular compression, are nevertheless convinced of the necessity of opposing osseous displacements of every kind, by means of an apparatus, which at once permits the patient to rise for the satisfaction of his various wants, and to get about at the proper time.

No doubt a great number of simple fractures equally accommodate themselves to the various modes of treatment in general use. We every day see apparently irreconcilable methods of treatment give, in these simple cases, the same satisfactory results. Certainly it would not be well to support by their number a statistical account intended to enhance a particular mode of treatment. It is far otherwise in certain serious fractures, the complications of which may offer considerable variation. Sometimes they are of so grave a character, that on the choice of the curative means may depend, not only the preservation of the limb, but even the life of the patient. For instance, it may be an osseous point, which, raising the skin under the influence of a continued muscular spasm, threatens to perforate it, and so convert a simple into a compound fracture; or there may be erysipelas, which, failing of resolution, terminates in gangrene, and leaves the bone, surrounded with pus, exposed to the air; or a portion of the skin may be contused, the languid vitality of which must be at once excited by suitable topical remedies to prevent gangrene; or perhaps a large joint, very much shaken by the fracture, has to be guarded from inflammation.

All success must attend the practitioner who would oppose this host of various lesions by one invariable method. Let us praise the efforts of all who seek to simplify modes of art, and render them accessible to those who have had neither time nor opportunity to mature their knowledge by experience. But let us not forget that the surgeon, like the physician, runs great risk of falling into error when, abandoning the character of a careful observer, he places the exigencies of a system above the indications revealed by the progress of disease.

One great advantage of gutta percha dressings consists in the liberty it gives the practitioner of using any kind of local application the nature of the injury may demand. Properly constructed, it permits the examination of the limb at any moment, as well as the ready employment of local depletion, emollient topics, antiseptics, &c., &c.

There are but few of the great principles revealed and maintained by modern surgery, in the cure of complicated fractures, which cannot be readily reduced to practice while employing gutta percha apparatus. Continued irrigation, the use of which, with the ordinary apparatus, is not always exempt from difficulty to the surgeon, and inconvenience to the patient, becomes, by the aid of this new method of dressing, an easy process. By means of some apertures, contrived in the inferior part of the shell, which encases the limb, the surgeon may confine the action of the fluid to any point he may desire. Gutters are affixed to conduct the water, and prevent the flooding of the patient's bed. The system of suspension, of the late surgeon of Lausanne, recourse to which is so frequently had in cases of osseous displacement produced by continued muscular spasms, may be executed with extreme facility by this new contrivance. We will speak of it when treating of permanent extension and counter-extension. There is nothing even in M. Malgaigne's bold invention for overcoming osseous displacements, in certain fractures of inferior members, (viz.: the fixing of the fragments by means of his *pointe en fer acérée*, the repeated success of which has dissipated the apprehensions it originally excited) which may not with the utmost ease be associated with gutta apparatus.

The subjoined cases, of M. André Uytterhoeven, will render any further explanation on our part unnecessary. They consist of a series of the various kinds of fracture, in which the surgeon was obliged to have recourse to means which will elucidate with tolerable faithfulness, the different propositions indicated above. The perusal of them will give the reader a sufficiently clear idea of the resources which the employment of gutta percha affords in the treatment of fractures in general, and of the practical advantage of the introduction of this new mode of dressing.

The reader will bear in mind, that in writing these lines we have only had in view the utility of the material application of gutta as a means of deligation and the facility with which it may be adapted to all exigencies; and this will excuse us from dwelling on the details of the cases as foreign to our subject, although by the way, well worthy of attention; especially those relating to the perforation of the bone with impunity by a steel screw. This new mode of procedure is doubtless deserving the notice of surgeons desiring to extend the limits of their art, but it is beside our present subject.

FRACTURE OF THE INFERIOR EXTREMITY OF THE RADIUS.

Adrien Bruno, 70 years of age, journeyman hatter, living at Brussels, rue St. Roch, No 6, was admitted September 27th, 1848. The day before entering the hospital he had fallen into a ditch. There was considerable swelling of the fore-arm, more particularly above the wrist; the hand in a state of adduction; excessive pain accompanied every movement of the limb; crepitation towards the inferior extremity of the radius. Reduction of the fracture; application of fomentations; inclined plane, the hand more elevated than the elbow.

The next day swelling and pain considerably diminished.

A dressing of gutta percha was now applied, composed of two splints, one anterior the other posterior, fixed by means of two circular bands of the same substance. To prevent displacement forwards of the fractured bones, a piece of gutta was slipped under the inferior band, corresponding to the solution of continuity, with the object of throwing back the displaced osseous extremities.

October 18th. The consolidation was complete, but before and above the wrist there remained an indolent fluctuating tumour, without redness of the skin, and probably formed by blood or the effusion of the synovia and lymph. The movements were somewhat awkward, as is the case in this kind of fracture from stiffness of the joint. Arm-baths, and plaisters of camphorated soap.

November 4th. The tumour remains. Application to the part

affected of ointment of nitrate of silver, made as follows :—nitrate of silver, 3j; distilled water sufficient to dissolve it; lard, one ounce; mix carefully. These applications were continued daily until the 9th of November, when boils appeared, and the remedy was discontinued. The effusion had disappeared.

November 11th. The patient quits the hospital, perfectly cured, and rejoicing in the free use of his arm.

FRACTURE OF THE FORE-ARM.

De Warpon had fallen on his hand and fractured the fore-arm towards the inferior third, July 7th, 1849. Swelling considerable. After some days employed in subduing the accidents, a dressing of gutta percha, composed of an anterior splint extending from the superior extremity of the fore-arm to the hand, was applied, and another posteriorly, not passing the inferior extremity of the fore-arm. These splints, wider than the limb, were fixed by two rings of the same substance, touching no part of the fore-arm.

July 29th. The dressing was removed, the consolidation was complete; no other deformity than that caused by the callus.

COMPLETE FRACTURE OF THE FORE-ARM.

Vandendries, Antoine, 8 years of age, living at Brussels, rue Notre-Dame-du-Sommeil, No. 81, was admitted September 5th, 1848.

The patient having fallen in the street, experienced violent pain in the left fore-arm, and inability to use it. He did not enter the hospital until the day after the accident.

Symptoms. Decided bending of the fore-arm about the middle, abnormal mobility, crepitation.

Treatment. Graduated compresses soaked in vinegar and water, two splints well fixed by means of a circular band; ordered to bed; the wounded limb placed on an inclined plane, the hand more elevated than the elbow. Three days afterwards, the swelling having subsided, the reduction was maintained by means of two gutta splints fixed by two rings of the same material.

These splints resembled those of Hippocrates, that is to say, they were level without, while the internal surface in contact with the skin was convex, thus acting as a substitute for the graduated compresses of Desault.

October 21st. The patient was pronounced cured. The movements were perfectly free, the deformity so slight, that the seat of the fracture was scarcely discoverable.

FRACTURE OF THE RADIUS (INFERIOR THIRD).

Entered the hospital December 30th, 1847, Marie Mellaert.—She had by a fall on her hand fractured the radius towards the inferior third. Small splints were applied anteriorly and posteriorly between the bones, convex on the inner surface, the better to separate the bones. Above these splints and extending along the fore-arm, an anterior splint was applied, and another posteriorly, both wider than the limb, the whole being confined by three bands of gutta in such a manner as to admit of the use of topical applications.



Discharged cured, February 1st, 1848.

COMMUNUTED FRACTURE OF THE RIGHT ARM.

Entered August 2nd, 1849. Lievens, J. B., sanguine, 38 years of age, was thrown under the wheel of a cart, which, passing over the arm, produced a comminuted fracture towards the inferior third of the humerus, with laceration of the soft parts. The

wound was immediately covered with collodion linen; the contusion was of so serious a character as to demand the utmost care in guarding against complications. The employment of irrigation was decided on; but, as it should be without intermission, recourse was had to other means of application than those depending on the activity of the attendants. The arm was then placed in a trough of gutta percha; the edges of this trough towards the elbow expanded into two pillars, terminating in two hooks bent inwards, on which was supported a small basin made of gutta



filled with water, which thus overhanging the fractured limb, and having a small opening at the bottom, preserved a permanent flow along a compress extending over the wounded part and intended to widen the stream.

August 15th. This treatment preserved the lower part of the arm from the threatened complications, but did not prevent the formation of an abscess at a contused point at the upper part of the arm. Suppuration from the wound had commenced. No change until the 24th, when the discharge diminished in quantity.

August 29th. The trough and irrigating apparatus were removed; two gutta splints, bent at the elbow, were fixed and supported by a stiff band. The patient was allowed to walk out; the arm supported in a sling until the cure was complete; he quitted the hospital September 12th.

SEVERE SPRAIN OF THE RIGHT FOOT.

G. Raymen, collier, 37 years of age, was, in consequence of a fall, brought to the hospital, January 22nd. He was suffering from a violent sprain of the right foot, with laceration of the internal ligaments. After some days repose, and the employment of resolatives, narrow splints of gutta percha were applied to both sides, fixed above (at the inferior third of the leg) by a circular band of gutta. These splints, bent, mounted the sides of the foot, and were fixed by another circular bandage. This slight apparatus, which allowed the limb to be examined, completely fulfilled all the requirements. The patient walked about by the aid of crutches. On the 11th February the cure was complete.

FRACTURE OF THE INFERIOR EXTREMITY OF THE FIBULA, WITH LUXATION OF THE FOOT BACKWARDS AND OUTWARDS.

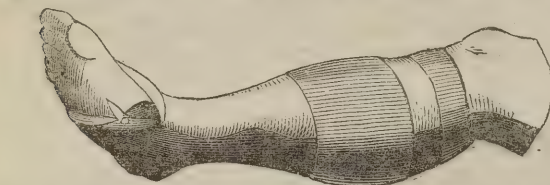
Marie d'Hongrie is brought to the hospital, January 20th, 1848, having on the previous day fallen on the footpath. Considerable swelling of the lower part of the leg and ankle. The fibula is fractured at its inferior fifth; the foot is elongated, and the heel carried backwards and a little outwards. The extremity of the tibia has slipped in front of the articulating surface of the astragalus. In consequence of the severity of the symptoms, all motion

is forbidden. Applications of emollient cataplasms, wetted with saturnine lotion.

January 24th. The severity of the symptoms has abated. Some attempts are made to reduce the fracture, but it is not found easy. Sub-cutaneous division of the tendo Achilles is made without hesitation, and the reduction is easily effected; it is maintained by means of two splints, the one anterior, the other posterior, which embrace the whole limb. The first, very thick, encloses the back part of the leg, the heel, and the sole of the foot, and moulds itself to the limb in a manner similar to a gypsum apparatus. The second, thinner, moulds itself upon the anterior surface of the limb, so that the foot is fixed between the two; and even if the tendo Achilles were not divided, it would be difficult for it to reproduce displacement. These two splints are fixed by means of buckled leather-straps. This bandaging remains until the 1st of March, when the relations are completely re-established, and the patient is suffered, after the application of an immovable bandage, to take exercise, using caution. After some time this dressing is in its turn removed; the stiffness of the joint is combated by passive motion and alkaline baths; it continued until the discharge of the patient, April 29th, 1848, and would probably do so for some time.

LUXATION OF THE FOOT OUTWARDS. FRACTURE OF THE FIBULA.

François Pipermans, 73 years of age, had fallen on the ice, and was not brought to the hospital until two days after the accident (January 20th). The foot was very much everted; the articulating surface of the astragalus, turned inwards, had lost all connection with the tibia. The fibula was fractured two fingers breadth above the malleolus; the internal malleolus pressed strongly upon the skin, which was much stretched and inclined to be sore. Intense inflammatory engorgement round the articulation. The reduction was effected, and maintained by a gutta splint, the inner edge of which, more elevated than the outer, was furnished at its lower end with a hook, which served as a point of attachment to a band designed to draw the foot forcibly inwards. Emollients, resolutives.



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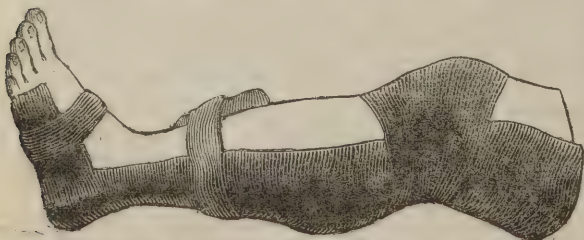
February 1st. All fear of the external wound communicating with the articulation is removed. The apparatus having become too loose in consequence of the subsidence of the swelling, another, in all respects similar was applied, with the exception that the *cravates de Mayor* were substituted for the circular bands.

On the 10th of February, the starched bandage was applied. On the 26th, the patient quitted the hospital, cured.

FRACTURE OF THE LEFT TIBIA.

Entered, November 28th, 1849, Arys, Leonard, 27 years of age, a servant, of lymphatic temperament; had been thrown down by the fall of a large cask. The left leg was shortened, deformed, &c.; oblique fracture towards the inferior third, with serious contusion. Fomentations were employed.

December 2nd. A dressing of gutta percha; two lateral splints and a posterior one were fixed by means of three circular bands, which did not, however, prevent the superior fragment having a strong tendency to start forwards. To remedy this displacement, a wedge of gutta percha was gradually introduced beneath the band on the inner side, just at the point of fracture.



December 8th. A slight degree of redness near the wedge was evident, the superior fragment appeared to be itself broken in two,

and, consequently, a large splinter of the bone, which was inclined to protrude, had now to be dealt with. The same means of contention were continued.

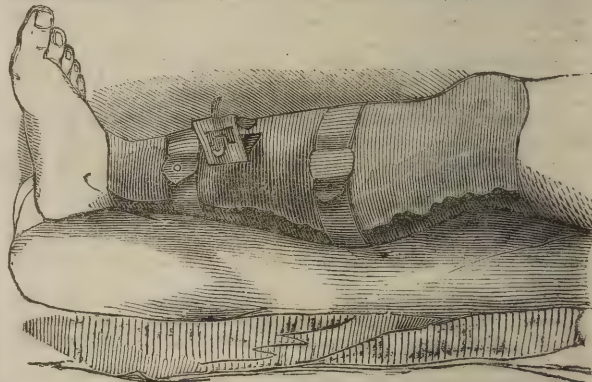
December 24th. The compression of the wedge had produced a slight soreness, from which, however, no ill consequences resulted.

January 5th, 1850. The whole was well maintained.

January 24th. Consolidation complete; joint stiff; discharged cured.

FRACTURE OF THE LEG.

Jeannet, J., 40 years of age, shoemaker, lymphatic temperament, had fallen, and was brought to the hospital, February 6th. There existed an oblique fracture of the leg with swelling, considerable ecchymosis and some contraction. The seat of the fracture was at the junction of the middle with the inferior third. The superior fragment raised the skin in front. It was reduced, and in order to maintain the reduction, two splints of gutta percha, the one anterior, the other posterior, were employed. These splints were connected by three circular bands; over the seat of the fracture three sides of a square were cut in the splint, the fourth side remaining intact, to serve as a hinge; this door, which was



secured by means of a little bolt, permitted the frequent examination of the fracture, and the employment of topical applications, and that without the slightest disturbance to the limb.

February 10th. Swelling and ecchymosis had disappeared. The circular bands were tightened, and the foot, which was somewhat turned outwards, was forced inwards by a folded compress placed between its outer edge and the apparatus.

February 16th. All unfavourable symptoms being removed, and the fragments having no longer a tendency to overlap each other, the starched bandage was applied, and in two days the patient walked with the aid of crutches. He quitted the hospital March 11th, without any shortening of the limb.

(To be continued.)

CORRESPONDENCE.

To the Editor of 'The Institute.'

DEAR SIR,—Amongst the objects of hygienic-medicine there is none of greater importance than matters of clothing; and in the conscientious discharge of his duty the physician is constantly finding himself in antagonism, not only with the reigning mode and fashions of the day, but also with the more enduring prejudices of his patients, and of the public generally. The satirists of all times have made the absurdities of fashion and the extravagances of costume, the objects of censure, sometimes with truth and common-sense on their side, and sometimes not. It is to the moral view of the subject that this class of writers have mostly addressed themselves; though there have not been wanting many (particularly of late, since men have had clearer views of the mutual relations of mind and body), who have observed and animadverted on the physical effects for good or evil, that have followed in the train of certain practices in the article of dress.

We need not go further for an illustration of the widely extended and beneficial influence of a just appreciation of the importance of this branch of the art of preserving health, than the reform in the dress of the common soldiers, directed by the best medical authorities and commissariat of the day, in the latter part of the administration of the Duke of York as Commander-in-chief, and during the Peninsular campaigns. Again, if we look nearer

home, we shall have reason to congratulate ourselves on a manifest improvement on the practices of our progenitors in the bandaging of infants, the absurdities of high-heeled shoes, and the enormities of the peruke.

But there is much yet to reform; and every one will agree with me that great ignorance prevails of the first principles that should guide us in the regulation of a natural and appropriate costume. There are isothermal lines in dress as well as in climate, and in the distribution of animal and vegetable life. Man is properly and originally a tropical animal. It is within the tropics only that he is able to exist as nature has made him, on the fruits of the earth, as they are produced to his hand, and with as little covering as the figurative expression of Holy Scripture has prescribed for him. Here at most, or on the borders of these burning climes, amidst the pachyderms who have no covering at all, and his kindred quadrumanes who have next to none, man is clearly taught that cotton, silk, and the materials of the lightest textiles, should form his proper clothing. As he recedes from the sun, nature follows and provides him with the suitable garments of temperate climes. We live in the climate of the sheep, and the staple of our clothing is, or should be, wool. In higher latitudes again, where fat and furs are the preservatives of life and health, man borrows the former, and may, if he be wise, cover himself with the latter. But without a proper regard to these obvious rules for our guidance, how do the prejudices and conventionalities of European life not contravene the simple dictates of nature and common sense. The flannel waistcoat is proscribed because "it is a bad habit to accustom yourself to flannel, for if you do, you will never be able to leave it off again." And children are sent about with bare busts and bare knees to be made hardy, and because it looks pretty and tasty. How many narrow chests and puckered up shoulders are there not to be attributed mainly to the exposure of the busts of children, and the want of shoulder straps. A woman carries her dress on her hips by the help of her bodice; but watch the motions of a child whose dress is slipping off its shoulders, and observe how it wriggles and lifts its arms, in vain attempts to correct the omission of the straps which should pass over the middle of the collar bones to secure the garment in its place, and leave the arms at liberty for their full and proper uses. I venture to say that more mischief is now being done by the neglect of giving proper covering to the chests and shoulders of children, than ever was done by tight-lacing—and that is a bold assertion too.

But I have been led into these general remarks, Mr. Editor, when it was my intention only to indulge in a few observations on a partial, and perhaps you will think a very trivial, matter,—namely, the projected reform of the hat, or the creation of some new, more commodious, and more *picturesque* covering for the heads of the most civilised and polished peoples of Europe.

For some time past, and especially since the projection of the Great Exhibition of the Arts and Manufactures of Europe, we have seen the subject of the hat occasionally urged on the notice of our manufacturers, and calls frequently made on the public to take the matter into their serious consideration. The discussion of such a subject cannot be quite out of place amidst the objects of domestic hygiene, and it cannot be more foreign to the purpose of your journal than it is to your contemporary, *The Builder*, who gave his readers, a week or two ago, a letter on it; believing, as we may suppose, that as much of our comfort and more of our consideration is derived from the "build" of the coat; so, also, that the build of a man, or of his clothing, could not be said to be perfect, whilst it failed of its best and crowning feature, of an appropriate "fineal" in the hat.

But, sir, though a reformer generally in the matter of costume,—the fabric, cut, and arrangement of our wrappers, and especially of the materials and fashion of the shoe,—you must allow me to say a word or two in defence of the hat. Not of the hat run up into the shape of a chimney pot, or degraded into the flatness of a trencher (craving their worshippers' pardon, the doctors and proctors and other "infernal fellows" of the Universities); but a good sound piece of felt, with room enough within for warmth in winter and coolness in summer, and with brim enough to defend the eyes from the direct rays of the sun, and the poll from rain. In a well-constructed hat, be it observed, the head rests in a narrow rim of lining, and above it is a chamber, more or less capacious, filled with a sufficient body of air to preserve an equable warmth, and defend the head from the extremes of heat or cold to which it would be exposed without such an intervention. The brim cannot be dispensed with in a climate so variable as ours, and it ought always to preserve breadth enough to answer the purposes above mentioned. I shall not quarrel with a moderate alteration of the shape of the crown; and if the dress generally can be made to assimilate, I would agree to the hat and plume too of the sixteenth century, for high days and

holidays; but would it be always in character in these work-a-day times? A crown of the cut of the modern "wide-awake" would surely not suit the reformers who hanker after the picturesque; and if it be of the exact form of the head it would want the grand requisite of the air chamber before spoken of. The Phrygian cap will not do—it has bloody associations with it. The helmet is military, and the *casquet* plebeian. The turban, or anything of the wrapper kind, is decidedly not fitted for Europe; and the sombrero only so for sunny skies and tranquil atmospheres.

For the present, then, I think we should be content to construct the hat of good material, with a crown, having a moderately elastic lower half where it sits on the head, such as might be constructed of some caoutchouc material, or what is called elastic-web; and a stronger and more resisting upper half, and with a brim fashioned to its proper purpose of a defence from sun and rain, and not too broad for the wind to inconvenience.

I do not think that anything can be found at present to supersede a good felt hat of this construction, with the elastic band I propose. The long prescriptive usage of Europe bespeaks the utility and general applicability of this form of covering for the head, for this quarter of the globe; and the outcry of the artist, and the call of the antiquary, be he mediæval or classical, is of itself nothing but a prejudice and a false taste, not grounded in a due consideration of the moral and physical fitness of things. The hat is as much a feature, and as worthy of expression in European costume as the Phygalian bonnet or crested helmet in the sculptures of Greece; and if utility be the proper test of grace and beauty, as some writers on taste assert, then we want little more to reconcile us to the long established practice of modern times; and it were mere pedantry and an æsthetical conventionalism to speak of that as unsuited to pictorial effect, which identifies the scene, and gives precision to time and place.

Pray Mr. Editor, in your senatorial wisdom, do not think the matter of this letter too trivial for the gravity of your readers. This year we are all in duty bound to be in holiday humour. Besides, you see, I have taken the matter of the hat reform much to heart. I have a right, moreover, to have a strong feeling on the subject, being able to say after Scaliger and Dibdin,* that my estate lies wholly under the garment in question.

Yours, &c.,

P. P.

To the Editor of 'The Institute.'

SIR,—In the number of your Journal for March 8th, is inserted, from the pen of Mr. King, of Bath, an article professedly on "the Comparative Size of the Hand of the Accoucheur, and of the Female Pelvis," though a full half of it is, singularly enough, devoted to an entirely different subject, viz., the sudden delivery of females, viewed in connection with certain *legal* considerations.

To this paper, it is evident, Mr. K. attaches no small importance, as he informs you he has already published it in the *Provincial Medical and Surgical Journal*. Permit, sir, a few remarks on the subject, viz., the Hand and Arm of the Obstetrician viewed in reference to Human Parturition.

Mr. King seems to have arrived at the conclusion, that a large number of "men-midwives" have "monstrous large hands and arms, as large as a sign-post," no wonder, therefore, that he thinks "it is extraordinary" that this matter has never attracted the attention of the "teachers" and "professors of obstetric science," or "the General Practitioners of midwifery," himself assuring us, that with such parties "it is, and should be, considered a matter of primary consideration" and "notice." Now, Mr. Editor, is it not reasonable to infer, from the universal and prolonged silence maintained on this matter by our most eminent authorities, that the "monstrous" developments, so eloquently denounced by Mr. K., have in practice been found so rare as not to merit from them any particular notice. The same inference is fairly deducible from another circumstance, which seems to have astonished Mr. K. not a little, viz., "that expecting ladies should never think of the size of the hand," when about to engage professional parturient assistance. Were these "hands" and "arms" so frequently "monstrous" as Mr. K. would have us believe, the thing would undoubtedly form serious and frequent matter for "consultation and enquiries among old aunts and cousins, old dames and washerwomen," and would inevitably result in the ruin of those unfortunate wights who might be found possessed of the "great monster arm" alluded to. Their silence is most ominous, and refutatory of the position assumed by Mr. King.

Sir, if I rightly apprehend the object sought in the paper

* Vide Colophon of 'Bibliomania.'

alluded to, it is to impress on the minds of all whom it may concern, the importance of pointing out to medical students, having these huge arms and hands, the necessity for their abandoning, at once and for ever, the practice of midwifery in their future professional career. The author, however, seems to lose sight of the important fact, that, as General Practitioners, they will be necessitated to practice this onerous section of professional duty, or be left behind in the race; also, the further consideration, that as obstetrics is specially calculated "to bring him (the young practitioner) before the public, and into notice," it is to be supposed that he will not on slight grounds forego the advantages which its pursuit holds out to him; I conclude, therefore, that if Mr. K. is not prepared to stop the student, unsuited to obstetrics, *in the very outset of his professional pursuits*, his denouncement of "great monster arms" and "hands," with the sad effects therefrom arising, will avail nothing to poor suffering humanity; but (as in all former ages) there will be still found some amongst us possessing the disqualifications alluded to.

That these "monstrous" appendages are comparatively rare, is to be further inferred from what is usually termed, "*the fitness of things*."

The great architect of our bodies, knew full well how to adapt the different parts of our corporeal structure to the special functions they are called to perform, as well as to their *remote or probable contingencies*. I confidently affirm, therefore, that professional men's hands and arms generally, will be found sufficiently small to admit of their cautious and safe introduction into the uterine cavity in the varied and complicated operations of obstetrics.

Observe, Mr. Editor, I freely admit there are "monstrous" upper extremities, and that these are unfitted to the facile performance of obstetric operations; but sir, I contend such instances are rare exceptions to a general rule; whereas Mr. K's. remarks would lead us to believe, that they are *very common*, ergo, constitute a very serious *existing evil* to society generally. Sir, I am myself, of about 5ft. 10in. in stature, and of ordinary developments, osseous and muscular, have assisted at about 5,000 births, and, from a connexion of twenty years or upwards with a large lying-in institution, have necessarily had to introduce hand and arm into the uterus in a large number of cases, yet I can honestly affirm that I never yet met with difficulties from size merely, where there was the ordinary development of female parts. Further, during the last twenty-six years I have been on terms of professional intimacy with upwards of fifty General Practitioners, but hitherto have neither met with, nor heard of, one gentleman who either "injured" or inconvenienced his patients from the source alluded to; and, sir, I feel assured, that in *this my experience*, I shall be borne out by that of your numerous readers, in opposition to the views entertained by Mr. King.

With best wishes for enlarged success to your interesting Journal,

I am, Sir, yours respectfully,
ROBERT HARDEY.

Hull, March 12, 1851.

MEDICAL INTELLIGENCE.

MEDICAL SOCIETY OF LONDON.

March 15, 1851.

DR. MURPHY, President, in the Chair.

The early part of the evening was occupied in proposing votes of thanks to the officers of the Society for the past year; after which Dr. Murphy, the newly-elected President, delivered the following address:—

GENTLEMEN,—On taking the chair of this Society as your President, my first duty is to return you my warmest thanks for the honour you have conferred upon me,—an honour of which I cannot find terms that will sufficiently express my high estimation. I can only assure you, in return, that no exertion shall be spared on my part to promote the interests and to support the dignity of the Medical Society of London. My best attention will be given to the various questions of interest that are brought before us; and, with your kind assistance, I shall endeavour so to regulate the discussions that arise, as to elicit the many valuable facts and sound practical opinions that I know only require such a stimulus to bring them to light. While we are thus seeking by discussion to call forth important medical truths, I am sure you will agree with me in the necessity of controlling the temperature of a debate. The collision of opinions is often necessary to throw light upon a question; the scintillations that emanate from it are often valuable

in reviving the dying embers of a discussion; but, at the same time, we must remember that the same cause may excite a conflagration, and deface the subject it was only intended to illumine. Thus it might happen that a discussion, if over heated, would become perfectly profitless. In the fire of a contest almost personal, the question itself is completely lost sight of. It is essential, therefore, to secure our Society from such a risk, and I shall use my best efforts to do so.

To render my meaning more intelligible, it may not be out of place to consider briefly the object of a Medical Society, the purposes it is designed to accomplish, and its value as an aid to medical science. The question has been more than once proposed, What is the use of a Medical Society? and the feeble support which they sometimes receive is like a silent confirmation of the implied objection. The reply to this query will at once present itself to the minds of those who, regularly attending this and similar Societies, are conscious that their time has not been mis-spent. But if the objector has not and would not do so, I would only ask him to look into society at large, and he must be blind indeed if he cannot perceive, throughout its entire extent, a busy movement, wherein all objects, whether good or evil, are sought to be effected by united strength. If the desired improvement be of a political or a religious character—if the object concern the interests of philosophy or of literature—whether it regard the study of the abstract sciences or the cultivation of the arts—if it be the observation of nature, whether in the construction of a world, or in the microscopic mechanism of its minutest inhabitant,—all these subjects afford so many illustrations of the advantages of association. There are societies for all. It is not therefore surprising that medicine should yield to the general influence, and that we should find societies springing into existence for the purpose of promoting the improvement of the healing art. Medicine would be an exception to every other subject, if it alone derived no advantage from a principle which gives life to all besides. But, so far is medicine from being an exception, looking to its essential character, I would assert that, beyond all other subjects, it requires this means of improvement. In the abstract sciences, it is in the power of an individual to follow out his demonstrations in the closet, and, without any other aid than the strength of his own gigantic intellect, to deduce, step by step, the most clear and startling truths. In the natural sciences it is still in his power patiently to observe, collect, and arrange the numerous facts which nature places at his hand, and, by their aid, to establish the most comprehensive and surprising conclusions. But medicine does not admit such a mode of investigation. Its principles could not be laid down by a Hunter or a Fothergill with the same conclusiveness as the demonstrations of a Newton, or the inductions of a Cuvier. It differs essentially from those sciences in this respect: we cannot grasp at its first principles, and our enquiry into causes is constantly embarrassed by the contradictory results that seem to emanate from the same cause. The vital principle is concealed from us, nor are we allowed to see the secret spring that sets in motion these unintelligible phenomena. We are, it is true, permitted to admire the tree of life at a distance; but if, attracted by its brightness, we seek to examine it more closely, our inquisitive gaze is at once dazzled, if not blinded, by the intensity of the light which protects it. Hence, in medical inquiries the most powerful intellects and the most patient investigators have failed to produce results commensurate with the labour that had been bestowed upon them; and, whilst theories the most brilliant, and seemingly founded upon the most conclusive reasoning, have been successively overturned, because of the sandy foundation upon which they were built, what alone remains of value are the "*Dissecta membra poetæ*"—the unadorned and scattered facts which formed parts of the superstructure.

Hence those who have done the most service to medical science are they who, with little reference to theory, have collected the largest number of facts. If, therefore, the improvement of medicine be best promoted by the accumulation of facts—by plain, clear, and accurate statements of what has been seen and observed even by one individual—does not this furnish us with a strong *à fortiori* argument in favour of a similar mode of illustration, conducted, not by one, but by several individuals—in other words, by a Society organized for the purpose?

It appears to me that the true purpose of a Medical Society is, the collection of medical facts whose accuracy is determined. The means of promoting such an object is within every one's reach who is content patiently to observe what lies before him. The benefit to be derived from the discussion upon such facts is, that similar facts may be elicited from other observers, so as to afford confirmation of that brought forward, and also in order that what is stated may be canvassed with critical attention, so as to separate everything that may appear doubtful or heterogeneous

and ultimately to leave in the possession of the Society a correct and valuable observation.

In stating such to be one of the chief advantages of a Medical Society, it is by no means intended to imply that it is the only benefit to be derived from it. By these remarks it is not designed to exclude the statement of opinion, or the proposal of ingenious, or it may be elaborate theories; on the contrary, I am quite aware that even in this respect a Medical Society is of infinite service as a kind of refiner of opinions. No one can be perfectly certain of avoiding error in the formation of a theory—the most cautious speculators have sometimes fallen into the most palpable mistakes; what more effectual or more suitable corrector can there be than a Medical Society conducted upon proper principles? A Society in which every one freely states the objections that occur to him, none indulging in a spirit of cavilling or ill-natured criticism. If the theory be sound it emerges from the discussion more perfectly established than before; if otherwise, the detection of its weak points may lead to a more accurate review of the principles on which it rests, and thus to its being advantageously modified and corrected. But let it be published with all its faults, and it is at once thrown aside on the general heap of medical speculations, which become the refuse of our professional literature.

If, then, it be admitted that a Medical Society is valuable and necessary to the promotion of medical science; the next question that proposes itself is as to the best means of carrying its objects into effect; and here we have to consider some of the objections that are occasionally levelled against these associations. "What is the use," it has been said, "of going to hear the speculations of Mr. A., or the laudations of Dr. B.? Wherein consists the advantage of listening to the unprofitable discussions of gentlemen who, having no data for their arguments, supply their place by the most contradictory assertions? What profit is there in witnessing two gentlemen, in single combat as it were, flinging unconnected facts and unsupported assertions at each other's opinions, which produce only confusion and perplexity?" If, indeed, a Medical Society were instituted for no better purpose than this, it would not only be useless but most tiresome and injurious. It would differ from all other societies that admit of debate, in a total lack of interest, because of a total lack of argument. It is only when a Medical Society deviates into such a course that the abuse disguises and defeats the object for which it is designed. *Controversy* is scarcely fitted for a Medical Society, and becomes a fair objection to those Societies in which it is too frequently permitted. It certainly cannot always be excluded; but it is never desirable. A great deal of time may be misapplied and wasted if a discussion merge into controversy, because medical questions are, of all others, the least adapted to this kind of examination. The data of medical propositions are so extremely uncertain, that an incontrovertible conclusion can seldom be deduced from them; hence, when controversy springs up, there being no basis for conclusive reasoning, it becomes little else than a series of positive and contradictory assertions, too often ending in an over-heated dispute, not less tiresome and fatiguing to the hearers than to the disputants. In the present day the medical periodicals are sufficiently numerous and liberal, and would give ample field for such combatants. There is another objection to Medical Societies; not so easily refuted, because it is sometimes impossible to avoid the difficulty. There are questions the very discussion of which disguises much more than elucidates truth. This objection applies especially to questions of fact, that form the foundation of new and controverted doctrines. A fact that is equally new and important, may be stated very clearly, but it bears a very intimate relation to a theory or to a practice not yet established, the source, perhaps, of much controversy. The theory may be directed against some principle, moral or otherwise, that is generally admitted, and should not be disturbed; or perhaps the practice, if recognised, may be capable of some dangerous or immoral application; there is, consequently, no little prejudice mixed up in its discussion; and the fact alleged being, as it were, unfortunately found in bad company, does not receive fair play. The objections raised against it are not as to its truth or falsehood, the accuracy or the inaccuracy of the report that is given of it, but are entirely aimed against the conclusion that the fact seems to establish. Every effort is made to prove a *non sequitur*; and, in a debate carried on with a zeal—with an animosity almost polemical, the fact itself is totally lost sight of. The patient auditors of such a discussion leave it in no little perplexity. They are quite satisfied of the danger, or even of the falsehood, of the doctrine which the fact was advanced to support, but they cannot be at all so clear about the fact itself. Its truth evidently had not been disproved, simply because it was not properly tested. As a fact, strong in itself, and apparently giving a powerful support to the theory that had been so zealously attacked, it is sufficient to out-

weigh all the arguments raised against the theory, and there is, therefore, some danger that the discussion may give strength to the error, and consequently produce an effect precisely the opposite to that which was intended. I am no advocate for the doctrine or the practice of homœopathy, hydropathy, or mesmerism; but I must acknowledge, that the erroneous manner in which the merits of asserted facts have been sometimes discussed has not strengthened my objections to them.

There are cases, then, where discussion may confuse a subject if prejudice creep in, and there are reported facts that must be disproved by experiment, not by arguments.

Personalities, I need hardly say, are most unsuited to a Medical Society. Personalities, in the strict sense of the term, would not be tolerated in any society of gentlemen, and of course not in a Medical Society; nevertheless, discussions sometimes take a direction that fixes the attention so completely on individuals rather than the facts of the case, and criticises their conduct or their practice with such severity, that it becomes very like a personal attack. In such cases it is very difficult to draw a proper line of distinction between what is and what is not personal. The shaft is professedly aimed at an abuse or an error in practice, but it is levelled with such force, that it penetrates much deeper, and wounds professional character. The sarcasm, therefore, whether intentional or otherwise, becomes a personal affront, and completely changes the character of the discussion; it is no longer a contest for truth, but a struggle for victory; the question itself is laid aside, and the Society becomes a kind of judicial court, that is to acquit or condemn some member of our profession of the charge that is in this way made against him. Now, nothing can be more inconvenient, because such a debate accomplishes neither the one thing nor the other. The question proposed is left unsettled—is not, perhaps, even touched; and the charge that is substituted cannot be fairly decided, because the facts are only partially stated. The Society differs from every other court of judicature in this, that the parties accused have no previous knowledge of the nature of the charge, nor of the facts in support of it; they are, therefore, unprepared to reply to an attack that any one possessed of a little forensic skill may make appear justifiable, and founded in truth. The Society may be, for the time at least, completely deceived, and arrive at a most unjust conclusion. A debate of this kind, then, is most mischievous, not only in excluding from consideration the proper subject for discussion, but in entertaining an ambiguous charge against some of its members, the validity of which it cannot determine. There is no class in the community whose existence depends more upon their reputation than medical men; there is none who may be more easily "filched of their good name." If it be the duty of a Medical Society to guard the interests of the profession, it is its duty to watch, with a jealous eye, any attempt, however insidiously made, to injure, through it, the reputation of any of its members. It is true, there may be gross abuses sometimes committed in the practice of medicine; it is equally so, that they may require some public exposure in order to correct them; but it is not true, that a Medical Society is a fit place for such a purpose, because the benefit that may be derived from thus exposing an abuse is more than counterbalanced by the injury that is done, if it happen that the accusation is unjust.

A Medical Society should neither be an arena for controversial disputations, nor a court for canvassing the merits or demerits of individual practitioners. Its purpose is the investigation of medical truth, the accumulation of well-ascertained facts, the impartial examination of the explanation of those facts, and the consideration of such theories as are offered for this purpose. Even in this point of view, it is not desirable to give a disproportionate attention to medical theories, to the exclusion of the more valuable occupation of collecting facts. The disposition to theorise is too fascinating not to require a check rather than an encouragement. If a society give way to speculative discussions, it will find itself too often indulging in an amusing dream that soon vanishes, and leaves behind the unpleasant reality of time and labour lost. Its chief object appears to me to be the collection of medical experience, and its diffusion, and thus to contribute to the promotion of medical knowledge. Such was the design of Fothergill, of Lett- some, of Jenner, of Woodville, and of Sims, when they first met in Bolt-court, and founded the Medical Society of London; such, I trust, will still be its object, and, for such a purpose, I am from experience assured that the Fellows of this Society will warmly co-operate. To aid in such an object, it is not essential to possess great ability, nor does it call for deep research. I would say to the most timid and hesitating amongst us, be not discouraged, nor fear to bring before the Society the results of your experience, however limited; a single fact is of value when added to others of a similar kind. Industry alone is required;

and if each will throw his mite into the treasury of experience, this Society will gladly receive the contribution, and will benefit much more by it than by speculative reasonings, however ingenious.

I have, gentlemen, thus wished to place before you the proper objects of this Society, in order that you may aid in carrying its intentions more perfectly into effect, which at present is particularly desirable, since the change that has lately taken place. You are aware that this Society has formed a union with another and a prosperous Society, on the principle *vis unita fortior*. This union had been the subject of anxiety to some, of much hope to others, and of some little ridicule to a third section of observers. The intended match, as it was called, was the subject of some merriment, —I will not say of envy—among the gossips. So long as the union was in contemplation, having the honour to be placed in rather a responsible position, I confess that it gave me no little anxiety. I fondly hoped that the intended alliance would prove as happy as it was respectable; but it was impossible to avoid some misgivings that when the honeymoon was over, a slight difference of opinion might spring up between the parties—there is nothing uncommon in that. I feared that, as in all such cases, each party being bound to maintain their own opinion, the difference might widen into a breach, and that there might even be some talk of a separate maintenance. But I am happy to say that these fears were perfectly groundless; the parties have lived in the most perfect harmony, and, what is more to the purpose, the object of this union, the object for which all such unions are formed is now being accomplished. Its offspring already give every promise that they will sustain the reputation of their distinguished ancestors. It shall be my duty to cultivate these scions of our race, to call forth their latent powers, and to secure to the Society all the advantages of their great ability. It may, perhaps, also be necessary to keep in check and to control that luxuriance of genius which would grow wild, if permitted unrestricted freedom. The pruning-knife may sometimes be required, but only to give strength. In plainer language, as this Society now includes a large section of the medical profession, as it possesses a full share of professional talent and experience, I look confidently forward to a series of profitable discussions; and, while it shall be my object to elicit every new fact and every useful observation that will illustrate the question before us, it will also be my duty to prevent irregular debates, and, as far as possible, to free the Society from such errors in discussion as I have endeavoured to point out.

I feel assured that in this object I shall have your full co-operation; and I trust that, when I again restore to you the responsible office with which you have honoured me, you will have no reason to think that I have failed in my duty to the Medical Society of London.

The President's address was received with great approbation.

MR. GUTHRIE'S LECTURES.

The President announced that, in consequence of certain experiments which Mr. Guthrie was performing, his next lecture was to be postponed from the 19th to the 26th inst.

AMPUTATION OF THE ASTRAGALUS AND OS CALCIS.

Mr. T. H. Wakley exhibited the patient on whom he had performed this operation, and promised to prepare a paper for the 5th of April, "On Excision of the Joints," in which this case should be embodied with others.

THE MAMILLATED CONDITION OF THE LEGS IN CERTAIN CASES OF DROPSY.

Mr. Nunn read a paper "On a Change which takes place in the Skin of the Legs of Persons affected with Certain Forms of Dropsy." In certain cases of dropsy, and especially in those dependent upon chronic heart-disease, towards the closing stage of that malady, when the legs have become infiltrated with fluid, and when the distention of the skin has arrived at a pitch which seems to threaten its vitality, it will be found that the cuticle gradually cracks, and that an exudation of serum takes place. The skin does not retain the waxy whiteness characteristic of anasarca, but changes to a reddish hue, or the cuticle separates from the true skin, and serum is poured forth more or less freely. The surface next becomes uneven, and, in the course of time, within a few weeks, the whole leg, from the ankle to the knee, is studded with elevations, varying from the size of a pin's head, to that of a pea, which in some parts are grouped together, so as to cause larger protuberances. They are moist and shining; around their basis is a whitish pasty secretion, and serum oozes from their surface. A brownish green staining encircles the

limb above the tuberculated part in some cases. This state is a result of anasarca, widely different from the ulceration following the formation of bullæ, or the large open sores produced by the separation of sloughs. It is a change, however, not of frequent occurrence, and has been mistaken for elephantiasis. It is attended with a great deal of pain and smarting. When the tuberculation of the skin is fully established, a profuse discharge of serum takes place, saturating the bandages. The fluid secreted has a peculiar, faint, sickly odour. It amounts to many ounces in the twenty-four hours. In proportion to the extent of the tuberculation and the amount of the discharge, is the relief experienced from the oppression of the vital functions, particularly of the respiration. The beneficial change is most striking; the fluttering pulse, the furred tongue, dry hot skin, parched lips, leaden countenance, and the laboured respiratory movements disappear: the size of the body diminishes, the brain again becomes active, the aspect brightens, and the most sanguine hopes of ultimate recovery spring into existence. When, from any cause, the discharge of the fluid is suppressed, even for a few hours only, it is followed by cerebral disturbance and congestion, and by uneasiness about the cardiac region. From this Mr. Nunn infers that the actual disease causing dropsy is not sufficient to induce death, but that the secondary effects of the effusion upon the vital functions is the more direful of the two agents, and therefore that, if the fluid can find an exit, the patient may exist in greater or less comparative security. But, unfortunately, this effort of nature has a tendency not to be permanent. In the course of time the mamillations shrink, the exudation becomes scanty, and at last entirely ceases, the leg being covered with a dryish scurf. In one instance, the patient survived this last change for more than a year. The preceding statements were illustrated by the detail of several cases which fell under Mr. Nunn's observation, or to which he was called by professional friends, and he then commented on the mechanism of the phenomena, first considering the nature of the discharge, and secondly that of the structural change which takes place in the skin itself. The fluid does not differ from ordinary dropsical fluid; it consists of water and albumen, with a certain proportion of the salts of the blood. No traces of urea could be found in it. Only one specimen, however, had been analysed, and Mr. Nunn, therefore, would be cautious in coming to a conclusion respecting its nature, as it is a point involving the important question of vicarious secretions. Mr. Simon's opinion is, that one organ can vicariously secrete for another only such materials as are common to both; if this be correct, then the presence of urea in the discharge cannot be expected. The relief afforded by the free discharge, Mr. Nunn, therefore, is inclined to attribute to the liberation of the parenchymatous organs from their load of serum, and their being thus enabled to perform their allotted functions. To illustrate the saturation of these organs, he mentioned that a kidney belonging to a person deceased from cardiac dropsy, was of double its usual weight, namely, eight ounces. With respect to the second question, Mr. Nunn was of opinion that the mamillations and tubercles were hypertrophied papillæ of the skin; and he further thought it possible that some noxious matters might be eliminated from the system with the serum. The next question to be considered was, how to favour the development of these secretory mamillæ, and to keep them in a sufficiently active condition. The first, he thought, would be effected by remedies which would soften the epidermis, and stimulate the circulation of the skin, without causing mischief, and both these objects he believed would be obtained by warm fomentations. The ordinary dressing should be a soft linen rag, slightly smeared with ung. cetacci.

Dr. King had under his care a case of a similar character to those narrated by Mr. Nunn. His patient was an intemperate old man, 70 years of age, and had suffered from repeated attacks of hydrothorax. The leg was covered with mamillations, and discharged freely. The decoction of marshmallows was used externally to the limb, and afforded great relief. This patient, who lived out of town, got considerably better; the symptoms of hydrothorax diminished in proportion to the discharge from the leg, and it was consequently decided to favour the discharge as much as possible. The results of the case were thus far decidedly favourable. He regarded the formation of these mamillations on the limbs as an effort of nature to relieve the internal disease; but he could not see any connexion between them and the disease he recollected, as having been shown to him as elephantiasis. Perhaps he was mistaken in the latter disease, and in the chronic form the mamillated leg may assume its characters. It is not very easy to keep up the discharge from the mamillations. He did not agree in the recommendation of the ung. cetacci, but he considered the fomentations were decidedly serviceable. If they were judiciously used, they would do all that was required.

Mr. Hunt thought that this form of disease had not elicited sufficient attention from the profession. The subject of abnormal and vicarious discharges was one of very great interest, and their management was a difficult problem. He believed it would be exceedingly difficult to encourage or arrest them by any external application. They are caused by a powerful spontaneous effort of nature, and he thought it would be better to attempt increasing the discharge from those internal organs which are under control, and to leave the limb alone. He should advise the use of hydrogogue cathartics, of diuretics, and sudorifics. When the urine is albuminous, and there is reason to suspect disease of the kidneys, we cannot readily act upon them; but still he would give nitre, and thus seek to check the force of the circulation. He (Mr. Hunt) had not had much experience in these cases, but he thought there was an analogy between them and cases of psoriasis, or of ulcerated legs with great discharge. The general opinion of the profession was, that if these were suddenly healed, it would endanger life by determining to the brain, or to some other organ; but he himself believed it might be done if, by internal medication, the secretions of the viscera were freely excited, and the diet so much diminished, as to keep the patient below par.

Mr. Love had seen several cases, such as those mentioned by Mr. Nunn, and had been so struck with the great advantage to the patient, derived from the profuse discharge of serum from the leg, that it had led him to think it might be advisable to excite such an action early, before the destructive inflammation occurred in the leg. He wished to ask if anyone had applied blisters in these cases. In all the cases he had seen, the patients died, not from the eruption, for that dries up when the anasarca ceases, but from the disease of the kidney or of the heart, or from exhaustion. The best external application in these cases he had found to be the ceratum plumbi cum creta. He generally placed something under the foot, so as to isolate it, and prevent excoriation.

Dr. Hare remarked that the cases narrated by Mr. Nunn were all instances of heart-disease, but he (Dr. Hare) did not suppose that he considered it to be limited to anasarca dependent on that cause. He had himself seen it in dropsy from albuminuria. He would not apply blisters in anasarca from heart-disease, but acupuncture may be used much more early than is generally admitted. Mr. Nunn had spoken of an enlarged kidney from infiltration of serum, weighing eight ounces: he would wish to ask him if there were not also some organic disease of the organ, as it is not common for that organ to increase three ounces in weight from mere infiltration.

Mr. Hird complimented Mr. Nunn on the great value of his paper, but he could not agree with him in respect to the treatment he proposed. In the closing stage of disease of the heart, &c., there is generally some diseased condition of the lower extremities, although not always that described by Mr. Nunn. Nevertheless, its establishment usually affords great relief to the distressed internal organs, even when there is not any discharge of serum. The mere determination of the inflammatory process to the lower limbs generally relieves the heart-disease. He had seen a few cases of the mamillated condition of the leg in anasarca from internal disease, and his treatment was to let nature take her course, keep the limb quiet, and use fomentations. He considered that Dr. Golding Bird's plan of the renal alternatives would be exceedingly valuable in this class of cases. They consist chiefly of the acetate of potash or soda, and he (Mr. Hird) preferred them to the other diuretics, which merely carry off the watery principles. This bore on the question as to the secretion from the mamillae, whether it was merely water, or contained any of the urinary salts. The quantity of solid matters discharged from the system by the renal alternatives was really enormous, while very little was removed by nitre, and the constitutional relief from the latter was consequently by no means so great as from the acetates. With respect to the question, whether the case should be left to nature, or the renal alternatives be exhibited, and thus cause elimination of a large quantity of solid matters from the kidneys, he himself would greatly prefer the latter, and would rather treat the disease by constitutional remedies, paying comparatively little attention to the local malady, than leave the case altogether to nature.

Mr. Harvey inquired of Mr. Nunn whether, in his cases, the urine was suspended during the existence of excessive discharge from the mamillated legs. That was the case in a patient of his. When the discharge diminished, the sufferings of the patient were greatly increased; but when it was re-established, the urine was suspended.

Dr. A. P. Stewart had attended a very remarkable case with Mr. Nunn, in which this peculiar condition of the skin of the integuments was very evident. The patient had had subacute bronchitis for several months; she suffered greatly from oppression

of breathing, and could scarcely ever sleep for more than two or three hours at a time. Colchicum at that time afforded her rapid and complete relief. She was better for some weeks, when another attack occurred, which was more difficult to relieve. The sputa became rusty and viscid, but he could not find any crepitus on examination of the chest; that, however, is not of ordinary occurrence in the pneumonia of the aged. The oppression of the breathing continued to increase; the heart's action became embarrassed, and the legs were swollen, with general anasarca. The symptoms increased in severity, so that she was utterly unable to lie down night or day, being obliged to lean forwards in order to breathe. Shortly after, the legs, being greatly distended, began to discharge, and that to an enormous extent. He (Dr. Stewart) did not see her again for a fortnight, when the anasarca had nearly disappeared, and the patient could lie down in comfort, and was able to sleep for hours continuously. After this the anasarca returned, and then the eruption commenced, with a tendency to gangrene. The pain was exceedingly severe; ptychæne and dark patches formed, which extended very slowly. The superficial sloughs separated, and the discharge was re-established, great relief being experienced. It was again suppressed, and the patient died nearly maniacal. This case, he thought, was interesting in many points. Mr. Hird had remarked that inflammation of the legs alone, without any discharge, would give relief to the chest symptoms; but here there was excessive pain and much inflammation, continuing for weeks, and yet no relief was experienced until a discharge of serum took place. He had employed mild liniments at first on the legs, but was obliged to abandon them on account of the pain they caused. Fomentations were afterwards used, and with benefit.

Mr. Nunn, in reply to Dr. King, observed, that he had not called the disease elephantiasis, but, on the contrary, he had said that it was not that disease, but had been mistaken for it. In Mr. Harvey's case, the mamillae were so well marked, that he (Mr. Harvey) had called them little kidneys. He had not found suppression of the urine attending an abundant flow of the serum from the legs. He could not agree with Mr. Hunt in the recommendation of low diet; the patients whose cases he had narrated, living in the low parts of Westminster, had, from their circumstances, sufficiently low diet already, but perhaps in the higher classes that plan of treatment might be beneficial. In ulcers of the leg, he never attempted a cure, if the disease were complicated with a cutaneous eruption; but if the integument were otherwise sound, he would seek to heal the ulcer. With respect to Dr. Hare's question respecting the kidney, Dr. Carle, the apothecary to the hospital, had mentioned it to him. It was taken from a patient deceased from heart-disease; it cut like a turnip, and he thought its increased weight was owing to congestion and infiltration with serum. He had weighed it himself; it was full eight ounces, the proper weight of a kidney being, he believed, four and a half ounces. Mr. Hird had alluded to the use of the renal alternatives, but he had expressly avoided all allusion to the treatment of dropsies, as it was not in his line. He had not the responsibility of the case, but was merely called upon on account of the state of the leg; nevertheless he should not like to exhibit powerful drugs, for when the blood is thus determined upon delicate organs, it may excite inflammation. He should prefer rousing the skin to increased action, as vicarious to the kidneys.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March 11, 1851.

J. HODGSON, Esq., F.R.S., President, in the chair.

Mr. Hodgson, on taking the chair, after the preliminary business of the Society had been performed, delivered a short address, in which he expressed his obligation for the honour conferred on him in electing him the President of that Society. He then gave a brief sketch of his connection with it, remarking that he had been one of its earliest members, and also had been chosen a member of the council soon after. With the assistance of the late Mr. Samuel Cooper, he had compiled the first catalogue of their library, and though afterwards his residence in the provinces had precluded his being an efficient member, he had still felt the greatest interest in their proceedings. He alluded to the great men who had preceded him in that chair, and especially to the talented physician who had occupied it for two years previously, and who had, by the admirable manner in which he had discharged his duties, rendered the task more onerous for him, his successor, and further remarked that by his election he was aware a honour had been conferred on the whole body of provincial

surgeons, by whom, no doubt, it would be highly and duly estimated.

The President spoke throughout in a low tone of voice, and on this and other occasions during the evening, when he addressed the Society, it was, in consequence, difficult to follow and understand his remarks. The conclusion of his address was received with applause.

An abstract of a paper by Dr. Ogier Ward,

ON THE COMPRESSION OF THE FETAL HEAD DURING BIRTH, and its immediate, consecutive, and remote effects, was read; of which the following were the main propositions:—That, under all circumstances, almost without exception, the head of the child undergoes a change of shape during birth, from which it recovers immediately, in the great majority of instances, from the elasticity of the bones, or from the effects of the first cries in producing determination of blood to the head. That, in some cases, the head retains its compressed shape for an indefinite period, during which time the child is apt to suffer from attacks of flatulence, convulsions, paralysis, and other cerebral affections. That there is reason to believe, from the observations of the author, that idiocy and insanity may also be produced by this deformity of the skull, and consequent depression of the brain, when it is not removed during childhood.* That the most efficacious mode of relieving the brain from this pressure is to excite the cry of the child after birth, and thus, by causing distension of the cerebral vessels, to produce expansion of the cranial bones. Thirteen cases were adduced in support of these propositions, of which four were instances of convulsions, one of symptoms of insanity, one of paralysis that ceased when the head regained its form—and all suffered more than ordinarily from flatulence. In two of the four cases of convulsions, the fits came on several weeks after birth, and were followed immediately by the restoration of the head to its normal shape. Some sketches were exhibited, illustrative of the various kinds of deformity described in the paper.

Dr. Heale had often noticed the great degree of flatulence mentioned by the author, as occurring when the brain is congested, and he believed it was a sort of compensation for the carbonic acid, which should have been given off during respiration, but which is not eliminated fully, owing to the influence of the disordered brain on the organs of respiration.

Dr. Webster observed that the author had alluded to Foville, when describing the compression of the skull as a cause of insanity. That disease is very common in Normandy, where the high head-dress is extensively worn, even by children, in whose heads deep impressions were sometimes made by the tight bandage over the forehead. Foville was formerly physician to the lunatic asylum near Rouen, where he had ample opportunities of ascertaining the fact, for insanity is very prevalent there. He wished to ask Dr. Ward, whether he had made out that the compression of the skull, as practised among the Caribs was a common cause of mental disease among them?

Mr. Arnott trusted that those gentlemen present who had made midwifery their especial study, would state whether their opinions and experience in this matter coincided with those of the author of the paper? Whether they believed that a contracted pelvis, or long retention of the fetus within the cavity of the pelvis would produce the physical consequences which had been described? Observing that Dr. Robert Lee was present, he called upon him by name to reply.

Dr. Copland said the subject had attracted his attention long ago, and he had described one or two of these changes, in the articles on the Cranium, and on Epilepsy, in his work on Medicine, twenty years ago; he had had since that time numerous opportunities of observing them at different public institutions with which he had been connected. There is one very interesting change, not altogether due to compression during the birth, which he had called the diamond-shaped head,—the oblique of Dr. Ogier Ward—of which he had described two varieties; in the one, one side of the head was pressed forward before the other—in the other, it was pressed upwards, and overlapped the other. The latest case of this which he had seen, was in a child eighteen months old. The mother had previously borne four or five children, none of whom were thus deformed, and consequently it could not be owing, in this instance, to compression from contracted pelvis during the birth. It was an excellent example of the diamond-shaped head. When he saw the child, he said at once it was subject to convulsions, and so it proved to be. This malformation may be met with after puberty, but it is then of rare occurrence, and the patients are subject to epilepsy. In those cases where one side of the head is higher than the other, there is generally palsy

of the other side of the body, and he inferred from that, that there was an insufficient development of the bones of the head, and of the brain. He was surprised that so important a subject had not met with more attention.

Mr. Cæsar Hawkins enquired whether these malformations might not be owing to the pressure of the walls of the uterus during pregnancy, instead of to the compression of the skull during the birth? He had been consulted in two cases of the diamond-shaped head: one of the children was ten months, and the other twelve months old. In neither were there any bad consequences, nor convulsions, and in both the head was gradually restored, by the efforts of nature, to the proper shape.

Dr. Robert Lee regretted that he had been called upon, as he was not prepared to speak upon the subject. His own impression was, that pressure during labour would not account for any of the symptoms described. He had seen the skull compressed in many ways, but did not recollect any case where permanent malformation or insanity resulted. It was most extraordinary how greatly the skull may be thus compressed, with in addition a large extravasation of blood under it, and yet all get right again. There is no doubt that extravasation of blood under the skull has caused the death of the fetus, especially when the forceps have been used. He had opened such heads, but his experience did not induce him to believe that any variety of malformation of the skull arose from its compression during labour.

In answer to a remark made by the President, which was inadmissible to us,

Dr. Lee exclaimed, how can a fetus be compressed by the uterine walls, when it is floating in the liquor amnii? When these malformations exist, they occur long before labour commences. The brain and heart, the genital organs, &c., may be either malformed, or altogether absent. There is generally no amount of compression sufficient to account for the malformation.

Dr. Ogier Ward stated, that he threw out only as a suggestion, the idea of insanity being produced at a later period by compression of the skull at birth. His attention had only been directed to the subject for the last seven years, and he had only been able clearly to trace this effect in one instance. He was, however, supported by the authority of Dr. Copland, as well as by the statistics of Foville. The latter had found, that in one half the male cases of insanity, and two-thirds of the female under his care, deformities of the skull were produced by the use of a peculiar head-dress in early childhood; and he (Dr. O. W.) considered that compression of the brain continued from the birth might have the same effect. With regard to Dr. Lee's and Mr. Hawkins' opinions, that such deformities were anterior to birth, and not congenital, he would object, that were this the case, the form of the head would rarely recover itself, or, at least, not immediately after birth. Nor could it be explained upon this theory, why one deformity (the oblique-shaped skull) should always be found on the right side of the head; which fact might, according to his view, be accounted for by the greater mobility of that side during birth.

STATEMENT OF A CASE OF CHYLO-SEROUS URINE.

By J. PIERCE, M.D., H.E.I.C.S. Bangalore;

WITH AN ANALYSIS OF THE URINE,

By J. E. MAYER, Esq., Madras Medical Service.

An English woman, born in India, 22 years of age, the mother of three healthy children, had been nursing the youngest for ten months when first seen by the author, in March, 1850. For the last five months the urine had been pale and milky, sometimes forming a jelly on cooling; quantity of urine rather large. The same state of urine had been observed after her other confinements, and had ceased after weaning. On this occasion she was advised to wean the child when she first applied for advice—viz., five months after her confinement. She declined, however, and was put on a course of tonics with generous diet. This plan was continued for about two months, having been interrupted for a few days by a feverish attack. At the end of this time, no improvement having taken place, the patient removed to Bangalore, and then came under the observation of the author. The quantity of the urine was at this time moderate; it was milky, formed a jelly when cool, and coagulated on the addition of nitric acid. The child was now weaned, the tonic plan of treatment continued, and in about three months the patient returned to her family considering herself well. The urine was less milky, did not coagulate on the addition of nitric acid, but still forms a jelly when allowed to stand for some time without being agitated. The analysis, by Mr. Mayer, showed that no casein, pus, or phosphates were present, but that it contained albumen and an excess of fat, from which he infers, that it is to "the presence of animal fat and albumen" that the milky appearance of the urine is attributable.

* The author referred to the writings of Dr. Copland and M. Foville in support of this hypothesis.

Dr. Black remarked that Dr. Macintyre had on a previous occasion read the particulars of a very interesting case, resembling that of Dr. Pearce. He trusted that if Dr. Macintyre were present, he would address the meeting, as he might be able to furnish very valuable information respecting it.

Dr. Bence Jones observed, that Dr. Black was in error: Dr. Macintyre's case was one of mollities ossium, and not of chylous urine. Dr. Black had confounded Dr. Macintyre's case with one narrated by himself (Dr. B. Jones), in which there was a large quantity of albuminous matter constantly passing off in the urine. The real interest in Dr. Pierce's case lay in the subsequent experiments, which showed how to distinguish between genuine cases of chylous urine, and those in which milk had been added to the urine subsequent to its evacuation, for the purpose of deception. The chemical details shewed that the chylous-serum was soluble in ether, which was not the case with milk added to the urine. Heat also would coagulate the albumen in the diseased urine, but would not form a clot in the urine with which milk had been mixed. These facts he thought, constituted the real value of the paper.

Dr. J. A. Wilson said that another point worthy of consideration was, how to cure this disease. He had had some years ago, in St. George's, a patient who had anasarca, and passed a large quantity of this white chylous urine. She had taken every possible variety of diuretic, none of which had done her any good. It occurred to him to leave the kidneys alone; diuretics could not be serviceable, if they were congested. He took the work off the diseased organs, gave up the diuretics, and ordered the hot-air bath, the vapour of burning spirit being introduced under the bed-clothes. This generally caused very profuse diaphoresis, working the skin as vicarious to the kidneys, and that too without introducing any poisons into the system, such as antimony. The effects of the hot-air bath were most gratifying; the woman improved wonderfully; the anasarca subsided, and the urine became clear and healthy. She had altogether about fifteen or twenty hot-air baths, after which she had tonics, and became so much better that she left the hospital to return to service. He saw her again two years afterwards; she was a fine, healthy woman, but still there was a little œdema about the ancles, but no chylous urine. She had not been in the family way, and consequently, with her, the chylous urine had nothing to do with nursing. The best plan, he thought, when any organ is disordered, is to let it alone, and not, when it is congested, give it double duty. If there be another organ which can act vicariously with it, direct the remedies, so as to bring it into increased action.

Dr. Seth Thompson would wish to ask Dr. Wilson if he thought his case was similar to that described in the paper, or was merely an instance of albuminous urine?

Dr. J. A. Wilson replied that the urine was of a dirty white colour, and gelatinous.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday,	March 22,	at 8 P.M.
MEDICAL CHIRURGICAL,	Tuesday,	do.	25, at 8½ P.M.
GEOLOGICAL,	Wednesday,	do.	26, at 8½ P.M.
ROYAL,	Thursday,	do.	27, at 8½ P.M.
ROYAL INSTITUTION,	Friday,	do.	28, at 8½ P.M.
MEDICAL SOCIETY,	Saturday,	do.	29, at 8 P.M.

THE INSTITUTE.

LONDON, SATURDAY, MARCH 22, 1851.

ON THE PRELIMINARY AND GENERAL EDUCATION OF THE PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

THERE is no profession of which the mental toil is so great, the avocations so various, or the responsibilities so heavy, as the medical. To acquire a right to practise it with benefit to the community, it is necessary to read and to digest the multifarious works which relate to its different branches; to acquire a practical knowledge of the structure of the human body by repeated dissections; and to study with diligence the

phenomena of disease at the bedside of the sick. When the necessary diploma and certificate—the goal of the Student, but the starting-point of the Practitioner—have been obtained, a series of new and complicated duties commence; the innumerable ills to which the flesh is heir demand the serious care of the Practitioner, who now combines with the studies conducted by the glimmer of the midnight oil, the active pursuits of professional life. And amidst the scenes of sorrow and suffering which we are called upon to witness, how great is the necessity for calmness of demeanour, for firmness of purpose, for soundness of judgment, for integrity of character.

The General Practitioner is the friend of the public in sorrow and in joy; he should rejoice with those that are cheerful, and he should be ready to sympathise with those that weep; he should maintain the character of a Christian, a philosopher, and a scholar, whether joining in the decent festivities of the baronial hall, or ministering to the wants of the dying pauper. During his chequered career, he comes in contact with all the numerous links which make up the chain of society—with the pauper, the prisoner, the soldier, the sailor, the tradesman, the merchant, the lawyer, the clergyman, the nobleman; and he is by turns the friend, the adviser, and the comforter of them all. Besides, the performance of those duties which strictly belong to his professional station, other claims are often made upon his attention; to him the secrets of families are often entrusted, and from him advice is often asked.

It is, therefore, essentially necessary that the General Practitioner should be a GENTLEMAN; that all his actions should spring from, and be directed by a high feeling of honour and integrity, and that he should be deeply impressed with a sense of the heavy moral responsibilities which his profession involves. Now, the most efficient method of making a gentleman is, to give to a boy A SOUND PRELIMINARY EDUCATION.

Of medical education, strictly so called, it is not our present intention to treat; we shall have abundant opportunities of discussing that subject on future occasions; but we are anxious to impress our readers with the necessity of a good general education, early commenced, judiciously carried out, and systematically enforced, in the case of all who are to become members of the Medical Profession. We should be unworthy to advocate the cause we have espoused if we did not insist upon this essential pre-requisite to a Practitioner's career; and we should be shrinking from our duty if we did not declare that, in the new Institute for General Practitioners in Medicine, Surgery, and Midwifery, a good preliminary education will be made a prominent feature in the proposed curriculum. We have opposed the existing Colleges, not because they are in general too strict in their educational demands, but because they are too lax; and if any of them have meritoriously endeavoured to improve the standard of general education, we shall hope to cope with them upon

equal grounds. We do not pretend to demand equality of privileges, unless we can show that we possess equality of education; but if we *can* prove the latter, we have a right boldly to demand the former. Upon the strength of a smattering of Latin and Greek (and in many cases it is very little else than a smattering) the graduates of our old established Universities have assumed to themselves a superiority of intellectual capacity above their neighbours, and by a monstrous exercise of Collegiate authority, the graduates of Oxford and Cambridge were actually formerly placed (upon the mere strength of their degree, and without any other quality whatever) above all the other graduates in medicine in the London College of Physicians! We are happy to say that this anomaly no longer exists, and we regard its abolition as one of the pleasing features of the growing intelligence of the age.

We do not condemn the system of instruction pursued at Oxford and Cambridge; on the contrary, we highly approve it. But we are anxious that the education pursued at those ancient seats of learning, should be more widely diffused among the community at large; and that a person should be able to gain the reputation of possessing something of classical and mathematical knowledge, although he may not have imbibed his early information on the banks of the Cam or the Isis.

When we consider the nature of the classical examination which is necessary to be passed by those who take a medical degree at the University of Cambridge, we are really ashamed that it should confer any title of superiority or pre-eminence. It is necessary to mention that in graduating in medicine at that University, it is not essential that the candidate should take the degree of B.A. before his medical curriculum; but it is imperative that he should pass what is called the Previous Examination. Now it will hardly be believed that this previous examination comprises only one book in Latin, one book in Greek, a portion of the New Testament, Paley's Evidences of Christianity, and Scripture History;* and this is positively all that has hitherto been required from graduates in medicine, at what we must justly call one of the most illustrious seminaries of learning in the modern world. Yet we blush to confess that this very slender allowance of classical and general knowledge (which might certainly be expected from any boy educated at a good school), does actually confer a certain amount of superiority upon the Cambridge graduates; for truth compels us to avow, that the standard of general education among the greater bulk of the members of our profession, is lamentably low. This, in fact, is our weak point; and it is in the earnest hope that the intelligence of the present day will in a short time remedy this glaring defect, that we have made the foregoing remarks.

The evil being once admitted, the remedy may be found without much difficulty; and, by the united efforts of the General Practitioners of this country, the stigma which now lies upon them, may be wiped away. Every one has it in his power to improve the standard of general education, not, perhaps in his own person, but certainly in that of his son, his ward, or his successor, and each one should come to the determination not to recommend the pursuit of the Medical Profession to any one who has not received a fair education.

We are old fashioned enough to recommend most strongly in the education of boys intended for our profession, the adoption of those branches of knowledge, which have long held the primary place at our great schools and colleges. However much we may admit that in the education of the mechanic, the tradesman, and the merchant, it is not essential to teach the refinements of Greek and Latin philosophy and poetry; and although we may grant that for such classes the acquisition of modern languages, and the knowledge of arithmetic and mechanics are perhaps better adapted, yet for the Medical Practitioner, who is to be essentially a gentleman in thought, in feeling, and in action; whose mind is to grapple with the most difficult questions in art and in science, in nature and in metaphysics; who is to mix on a footing of equality with the learned and the accomplished of the land; in his case we say that there is no preliminary course of education so admirably well suited to develop the energies of the youthful mind as a careful study of the writers of Greece and Rome, those illustrious lands from which have flowed such copious streams of wisdom, of wit, and of eloquence, to irrigate the mental soil of all succeeding ages. Nor in the present age of speculation and mysticism ought the exact sciences to be treated with neglect; but the mind should, as early as possible, be initiated into those habits of accurate reasoning, which are induced by the studies of geometry and of logic. In these pursuits would be found the most effectual safeguards against loose reasoning, and vague habits of theorizing, and had the minds of our Profession been thoroughly imbued with the advantage of the inductive method of arguing, we should have heard very little of the absurdities of homœopathy and hydropathy; these pseudo-sciences would never have emerged from their primitive obscurity, or would have been practised only by notorious and avowed quacks.

The improvement in the preliminary education of the Members of our Profession, might be accomplished without much trouble, and at a comparatively small expence. There is in this country an abundance of good schools, and their number increases every day; let each one, therefore, who has the care of youth, select a good school, and endeavour to ascertain, by frequent examinations, the progress which the pupil is making, and if, at the age of fifteen or sixteen, the boy is not able to translate a Greek or Latin author, or to work out a problem in geometry, he is not fit for the Medical Profession. He should go back to school for a year, and he will afterwards commence his medical studies with far greater advantage.

We regret very much that none of our public Examining Bodies (except the University of London) has hitherto proposed a preliminary examination for Students *before they commence their medical studies*. Such a plan would be most highly beneficial to all parties; the Students, if found properly qualified, would enter upon their medical curriculum with every prospect of success; but if they fell short of the demands of the Examiners, they would have an opportunity of repairing their deficiencies at a comparatively early period, and would avoid the risk which some of them at present run, of exposing their own ignorance to the public, and thereby bringing discredit upon what ought to be a liberal and scientific calling.

* We believe it is intended to add some Mathematics, and we highly approve the addition.

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

*(Extracted from the 'Paper of Transactions,' dated July, 1845.)**Continued from page 221.*

- Morton, E., 10, Wood street, Spitalfields
Morton, R., Aylsha
Mosgrove, F. I., 23, Finsbury place
Mosgrove, J. T.
Moss, G., Stickney
Mossop, J., Whitehaven
Mott, W. R., Brighton
Mott, C. G., 118, Albany street, Regent's park
Mould, T., 45, Brompton row
Moxhay, W., 4, Brunswick terrace, Dover road
Moxon, I. B., Hull, Demonstrator of Anatomy at the School of Medicine and Anatomy
Moyle, R., Penzance, Cornwall
Moyle, J. G., Penzance, Cornwall
Mudd, B. R., Gedding, Suffolk
Muller, J., Higher Brompton
Muller, F., 46, Hans place, Sloane street
Muller, S., 14, Eden place, Old Kent road
Mullins, G., Kentish town
Mundell, John, Allonby, Cumberland
Murdoch, W., 320, Rotherhithe street
Muriel, C. B., 4, Wellington street, London bridge
Muriel, C., 10, Clapham rise
Muriel, Wm., Wickham market
Muriel, J., Ely
Munroe, H., Hull, Yorkshire
Munroe, H., Hesse, Yorkshire
Myers, H., 94, Milton street, Lisson grove
- Nance, J., Eccleshall
Napper, Albert, Guildford
Napper, Thomas, Dorking, Surrey
Nash, W. L., Leatherhead
Nason, E., Nuneaton, Warwick
Nathan, H., Woolbridge, Dorset
Neal, H. M., 8, Sloane square
Neale, J. C., 15, Upper Jubilee street, Mile end road
Name, J., Margate
Nedham, J., Leicester
Neott, G. E., 110, Great Suffolk street, Bow
Nield, J. C., Bristol
Nelson, H., East Retford
Nelson, Thomas, Douglas, Isle of Man
Nesbitt, T., Yeovil, Somerset
Nettlefold, Edward, Great Dover Road, Apothecary to the Surrey Dispensary
Neville, W. H., Esher, Surrey
Neville, H., Esher, Surrey
New, T., 4, York place, Mile end road
Newcomb, R. R., Stamford, Lincoln
Newell, I., Bridgnorth
Newington, S. W., Goudhurst, Kent
Newman, M., Mere, Wilts
Newman, W., Mere, Wilts
Newth, G. E., 110, Great Suffolk street, Borough
Newton, F., 26, Howland street
Nicholls, W., 15, Queen street, Bryanstone square
Nicholas, Fishguard, Pembroke
Nicholls, J., Wells, Somerset
Nicholson, J., Dronfield, Derby
Nicholson, J., Ashbourne, Derby
Nicholson, J. (M.D.), Bawtry, York
Nichols, Richard, Barnsley, Yorkshire
Nicol, J., Queen's road, Dalston
Nicolle, E., St. Hillier's, Jersey
Nicolson, T., 48, Davies street, Berkeley sq.
- Niell, J., 175, Aldersgate street
Nind, C., 13, Bath place, Peckham
Nix, W., Walworth
Noble, C., Brixworth, Northampton
Noel, D. C., Worcester
Nolan, J. M., 9, Weymouth place, New Kent road
Noot, T. G., Bigilly, near Tenby, South Wales
Noot, W. L., Cardigan
Norman, J. S., West Mersea, near Colchester, Essex
Norman, W., Taunton, Somerset
Norman, R. R. B., Great Yarmouth
Norman, G. B., Ilkiston, Derbyshire
Norris, H. E., South Petherton, Somerset
Norris, T., Stafford street, Liverpool
Norton, J. H., Shirley, near Southampton
Norton, E.
Norton, M., 16, Gloucester place, New road
Norton, E., 29, Upper Baker street, Regent's park
Norton, —, 29, Upper Baker street, Regent's park
Norton, R., 11, Oxford terrace, Edgeware road
Norwood, E., Hertford
Nosworthy, J. L., Moreton Hampstead, Devon
Nott, T., jun., Bere Regis, Dorset
Nott, James Stewart, Coggeshall
Nottage, Jas. B., Oxford street east, Liverpool
Noverre, A., Stanmore, Middlesex
Nowell, R. B., Dewsbury
Noyes, H. G., 42, Moorgate street, City
Nuneham, A., Alton, Hants
Nunn, J., East Bergholt, Suffolk
Nussey, John, 4, Cleveland row, St. James's
- Oates, J. P., Sutton Coldfield, Warwick
Oates, Parkinson, 17, Tavistock place
Oakeshott, J., Highgate
Obre, Henry, 31, Grove place, Lisson grove
Ochiltree, C., North Shields
O'Connor, William, 21, George street, Portman square
Odling, F., 2^d, Oxford street
Oldfield, J. B., Heckmondwick, Yorkshire
Oldham, J., Brighton
Oliver, N., Durham
Oliver, W. H., Chalfont St. Peter's, Bucks
Oliver, G., Newton-on-Trent
Olive, G., Northampton
Ollard, W., Wisbeach, Cambridgeshire
Olley, E., Leighton Buzzard, Bedfordshire
Ord, G., Brixton hill
Ormandy, Isaac, Dalton-in-Furness
Ormerod, W., Bristol
Orsborne, —, Bittern, near Southampton
Orton, R., Sunderland, Durham
Orton, J., Foleshill, Warwick
Orton, J., Beeston, Nottinghamshire
Orwin, J., Worcester
O'Shea, M. K., Bridge road, Lambeth
Oswald, R. H., Douglas, Isle of Man
Oswald, H. R., Ramsey
Ottley, J., Maidstone
Ottley, E., Leighton Buzzard, Bedfordshire
Ottley, D., 5, Bedford place, Bloomsbury
- Otway, D. W., 11, Canterbury row
Overton, J., Coventry
Owen, H. K., Stockwell
Owen, J. R., North Shields
Owen, A. P., Aylesbury
Owen, W. B., Finchfield, near Braintree, Essex
Owen, E. R., Oxford
Owen, O., Coleshill, Warwick
Owen, H., Stockwell
Oxley, J. F., Askern, York
- Packard, F., Yoxford, Suffolk
Packer, C., 12, Pittfield street, Hoxton
Padmore, F., St. Hillier's, Jersey
Page, F., Newmarket
Page, J., Lynn Regis, Norfolk
Paget, T., Leicester
Paige, J., Dartmouth
Paile, W. P., Southampton
Paine, H. J., Cardiff
Painter, R., 4, Broadway, Westminster
Paisley, W. H., Worle, Somerset
Pallance, A.
Palmer, A. Q., Christchurch, Hants
Palmer, J. S., Weobly, Hereford
Panton, G., Dorchester
Pargetter, H., Fordingbridge, Hants
Park, M., 100, Old street
Parker, W., 5, Parker's row, Bermondsey
Parker, T., Woburn, Beds
Parker, T. P., Sunderland, Durham
Parker, J. B., Exeter
Parker, E., Northern Hospital, Liverpool
Parker, G., Swansea, Glamorgan
Parker, J., Tunbridge, Kent
Parker, J., Mirfield West, York
Parker, S. P., Hatfield Broad Oak, near Harrow
Parker, T., Aspley, Beds
Parker, G. J., Bristol
Parkesson, J., Elmham
Parkinson, C. B., Wimborne, Dorset
Parkisson, Alfred, Penkridge, Staffordshire
Parkison, B., East Dereham, Norfolk
Parnell, T., Wells, Somerset
Parratt, J., 18, Mount street, Grosvenor square
Part, J., 2, Cambridge terrace, Camden town
Parry, R., 9, Church row, Newington Butts
Parry, J., Dorking
Parsons, G., Long Sutton, Lincolnshire
Parsons, J., Beckingham, Somerset
Parsons, C. H., Ansty, Warwick
Parsons, C. A., Godalming, Surrey
Parsons, J. St. John Geo., Bristol, Surgeon to the Dorcas Society
Partington, J. E., Manchester
Partington, J. E., jun., Manchester
Partridge, A. I., jun., Colchester
Partridge, S. T., 12, Montague street, Portman square
Partridge, S. T., 2, York place, Baker street
Pater, W. G., 1, Marine place, Commercial road east
Paton, J., Ramsey, Isle of Man
Patterson, J., Duxford, Cambridge
Pattison, J. E., 1, Maismore place, near Peckham
Paul, J. H., 29, King William street, City
(To be continued.)

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLXXVI.—NOTES OF A CASE OF POISONING BY ARSENIC. By BENJAMIN W. ROBINSON, M.D., of Fayetteville (U.S.)—On the night of the 8th of November, 1849, I was hurriedly summoned to Mr. Alex. C. Simpson. Found him with a countenance evincing great anxiety and distress, surface cold, pulse extinct, respiration somewhat hurried, and complaining of intense pain, which he referred directly to the epigastrium, with a sense of sinking at the præcordia. To allay the pain, which he declared to be insupportable, I was in the act of administering a dose of morphia, when his medical attendant, Dr. Mallett, entered the room. The Doctor agreeing, twelve or fifteen drops of Magendie's solution of sulph. morphia were given. From Dr. Mallett, I learned that he had been called to the patient about ten o'clock that morning, when he was informed that Mr. S. had been sick all the preceding night, with nausea, vomiting, thirst, and pain at the pit of the stomach. These symptoms existed at the time of Dr. M.'s visit; the patient's pulse was rather small and feeble, which was ascribed to nausea, and he vomited some mucous matters tinged with bile. Dr. M. ordered a mustard poultice to the epigastrium, and a pill consisting of five grains calomel and $1\frac{1}{2}$ grains opium as soon as the stomach could retain it—to be repeated in two hours. Saw him again in the afternoon; was told that during the interval of his visits Mr. S. had had several dark and fetid evacuations from the bowels. Finding his symptoms aggravated, Dr. M. directed a dose of morphia, and left with a promise to see him again after tea. To rally his rapidly failing powers, we gave ammonia and brandy in repeated doses—administered an enema containing brandy and quinine; had frictions practiced with dry mustard; warm applications to extremities, and hot poultices to the abdomen.

A few moments before he expired (which was in less than an hour after I entered the room), he was raised to the sitting posture, and on being laid down gasped a few times. I quickly placed a piece of paper saturated with spirits of turpentine over the region of the heart, and swept across it the flame of a candle—but that heart had throbbled its last. Here was death by asthenia. Neither coma nor delirium had at any time existed. No vomiting or purging while I was present.

As we rode from the house speculating as to the cause of death in this case, and unable to arrive at a satisfactory solution of the question, it was suggested that a *post-mortem* examination for our own satisfaction should be proposed to the family, which the doctor promised to make next morning. He did so to Mrs. Simpson, who, after manifesting what was deemed a very natural reluctance, consented. She however subsequently declined permitting it, moved apparently by the repulsive feeling excited in the mind of a near female relative. During the day, suspicions of foul play were rife in the community, and a coroner's jury was summoned to inquire into the facts of the case.

On the morning of the 10th, James T. Gilliam, M.D., William P. Mallett, M.D., James A. McRae, M.D., and myself, were requested to appear before the jury of inquest and institute a *post-mortem* examination.

Autopsy thirty-eight hours after death.

Nothing peculiar in the appearance of the body. On opening the thoracic and abdominal cavities, a notable degree of preservation and entire absence of cadaveric odour were remarked.

Head. Not examined.

Thorax. Lungs apparently healthy. Right adherent to costal pleura by a band evidently of non-recent formation. Left collapsed. Heart removed, subsequently minutely examined; no evidence of disease, however, could be discovered.

Abdomen. The stomach, duodenum, and some thirty inches of jejunum, showed very decided marks of inflammation. Larger intestines remarkably contracted and pale. Liver, spleen, and kidneys examined superficially, *in situ*, discovered no abnormal appearance. Bladder contracted and empty. A ligature was tied above the cardiac orifice, and another at the point on the intestinal tube where the diseased appearance ceased, and the parts included removed.

Some hours subsequently, the stomach was laid open, and found to contain thirty or forty ounces of reddish-brown bloody-looking fluid with some semi-solid matters. Its inner aspect presented marks of a high degree of inflammation. Numerous erosions of the villous coat, varying in size (the largest, situated near the cardiac opening, must have measured seven or eight lines in length by three to five in breadth), were revealed, in and around which chiefly were patches of white agglutinated particles. A less

intense, though very marked redness pervaded that portion of the intestinal canal which had been removed in which no erosions or ulcerations were detected.

A portion of the fluid contents of the stomach, which had been received in a clean vessel, was put into a dish over the fire and evaporated very nearly to dryness. With distilled water, the residuum introduced into a clear Florence flask was boiled for half-an-hour, and then filtered through paper. Tests were prepared by dissolving sulphate of copper and nitrate of silver respectively, and adding to each solution a solution of ammonia, till a precipitate was thrown down and then nearly re-dissolved. To a portion of this filtered liquid in a clean glass, a few drops of the ammonio-nitrate of silver test were added, resulting quickly in a light yellow precipitate, which afterwards changed to a brownish colour. To another portion in a separate clean glass, the ammonio-sulphate of copper test being added, produced a green-coloured precipitate—apple green. With another portion we tried Reinsch's test. After adding to it in a tube a few drops of hydrochloric acid—which we had reason to believe was chemically pure—a few pieces of bright copper were dropped in, and the liquid boiled for a few minutes till an iron gray coating was deposited on the copper. The metal was removed, washed, and dried, and then placed in another (short) tube, and strong heat applied, resulting, however, in no distinct sublimation. With a known solution of arsenic, the copper test was tried with a result agreeing precisely similar with that just named. A decoction of beef with bright copper was subjected to the same process, but no perceptible change occurred in the metal. The two liquid tests were applied to a known solution of arsenic, and gave results precisely similar to those noted as occurring on their addition to the suspected liquid. Some of the white particles from the stomach, placed on a bit of charcoal, ignited by a blowpipe, gave off a vapour in which the garlic odour was recognised.

It was here suggested, that more confidence in the results of our investigations might obtain on the part of the community, if the Reverend Doctor Colton, who was favourably known here as a lecturer and practical chemist, were associated with us. He was accordingly invited, and joined us on the succeeding day.

Second series. Conducted by Mr. Colton. After using the two liquid tests before prepared, with results corresponding with those previously obtained by ourselves, he alkalisied two drachms of the suspected liquid with three grains carb. potass., and added two drachms of a solution of sulph. copper (two to five grs.), causing a grass-green precipitate. Water charged with sulphuretted hydrogen gas, was added to some of the suspected liquid, producing a yellow colour, which resulted, after some hours, in a sulphur yellow precipitate. A portion of the green precipitate (suspected arsenite of copper), after being dried on a filter, was put into a tube—similar to that described as Clark's, save that the bulb was relatively larger and stem narrower—with charcoal, and subjected to heat with a spirit-lamp. A ring of iron gray colour and metallic lustre formed in the neck of the tube, to which heat being applied, minute distinct crystals sublimed on the cooler part of the stem.* Correlative experiments of the liquid and reduction tests with known arsenic, gave results corresponding respectively with those just described. Some of the green precipitate (suspected) put into a platina spoon with charcoal, under blowpipe heat exhaled the garlic odour, distinctly marked—as, also, did some of the white particles picked from the stomach treated in the same way.

From these facts, observations, and experiments, we deduced the opinion—and reported to the jury—that Alexander C. Simpson had died from the effects of an irritant poison, and that that poison was arsenic. Other testimony before them, tending to inculpate the wife of the deceased, they agreed upon the verdict, "that Alexander C. Simpson came to his death by poison received in his stomach, and they are inclined to think that the poison was administered by Mrs. Ann K. Simpson, the wife of the deceased."

Before the warrant issued for her apprehension could be served, she escaped and fled the country, but returned on the eighth of November, 1850, and surrendered herself to the sheriff. On Thursday the fourteenth, she was put upon her trial for murder.

Pending the interval of her return and arraignment, another series of experiments was made with some of the white particles from the stomach, which had been received on bibulous paper,

* Dr. Colton, in his evidence before the court, did not speak of this ring as the reduced metal, but testified to the crystals. The text here is from our notes. His were not made at the time, but subsequently. He was certainly understood at the time as agreeing with us in our appreciation of it.

That this had the true characters of the arsenical ring confirmed by the correlative experiment with the known arsenious acid, and that in so carefully conducted an experiment as this was, it was a condition necessarily precedent to the sublimation of the crystals, I respectfully submit.

carefully folded up, enveloped, labelled, and put away. These experiments were conducted by Mr. Samuel J. Hinsdale, a very intelligent and accomplished practical chemist of this place, who was absent from town at the former investigations—Doctor Mallett, Doctor McRae, and myself being present and assisting.

Third series. Some of the white particles were put into a tube with a flux of dried carb. potass. (two parts) and charcoal (one part), and subjected to the heat of a spirit-lamp, till a well-marked ring of iron gray colour and metallic lustre, presenting on its inner face a distinctly crystalline appearance, was produced. That portion of the tube on which the crust or ring had formed, was cut off by a file and placed in a larger test tube, heat applied with the spirit-lamp, and crystals in some abundance deposited on the cooler part of the tube. Distilled water was then added and boiled till the crystals were dissolved. To one portion of this solution, the ammonio-sulph. copper test was added, resulting immediately in a precipitate of greenish colour. To another portion, a few drops of the ammonio-nitr. silver test, with precipitate of light yellow resulting, which shortly changed to a brownish hue. Into a third portion sulphuretted hydrogen gas was introduced, producing quickly a sulphur-yellow colour, and, on being heated and acidulated, giving down a yellow precipitate. Mr. Hinsdale also tried Marsh's test with a satisfactory result, as I learned from him. I was not present during the whole of the experiment.

Of the medical witnesses, Dr. Mallett and myself only were examined. Rev. Dr. Colton testified to the results of his experiments, corroborating our opinion.

It was in evidence that the prisoner had purchased an ounce of arsenic a few days before Simpson's death—that they did not live happily together—that she acknowledged a fondness for another man—had only married Simpson to get a home—had consulted a fortune-teller about a week before his death, by whom she was told he would not live a week, &c. It was also proved that she had prepared two glasses of syllabub, which he ate at dinner on the day on which he sickened, and at tea had given him a cup of coffee, both presented under circumstances which, being subsequently recurred to, excited suspicion—and that her conduct just after his death betrayed such destitution of proper feeling as to provoke censure.

It was charged in the bill of indictment that she had administered arsenic in the syllabub, and again in the coffee.

Although not in evidence before the court, it might have been proven* that Mr. S. complained of nausea, and vomited soon (probably within half an hour) after dinner. The trial occupied the whole of Thursday and Friday, and was continued till 4 o'clock A.M. on Saturday. After retiring from one to three hours (variously stated), the jury returned a verdict of *Not Guilty*.

Remarks.—It has been a matter of regret to me that other organs—more especially the liver, rectum, and genito-urinary organs—could not have been more particularly examined, but the circumstances and restrictions as to time under which we were placed operated to prevent it.

It was in evidence, and will here be seen, that Reinsch's test was not satisfactorily completed. When it is stated that, having broken some of our tubes, and no more suitable apparatus being immediately available, we were driven to the use of a thin 3 j i vial, not longer than two and a half inches, and that our strips of copper were at least an inch long, the reason will be sufficiently obvious. It was laid aside with the purpose of taking it up again, but omitted, as the chemical evidence from other sources was deemed conclusive.

Pert counsel spoke flippantly of "inexpert doctors and chemists." Expertness in the anatomical and chemical manipulations could only have been rightly judged of by a competent observer—as a gratuitous assumption, therefore, it may pass for what it is worth. Whether or not we have betrayed a want of expertness in arraying an amount and kind of testimony equivalent to irrefragable proof of the existence of and death from arsenic in this case, we prefer to submit to our peers, in the belief that they are somewhat more competent to determine the question than a Bar suddenly learned (on this point) or a Jury astutely picked.—*American Journal of Medical Science*, 1851.

* It is very far from my purpose to impute blame to the counsel for the State, who, for the firmness, faithfulness, and ability exhibited in the discharge of their whole duty, richly deserved the high commendations bestowed on them by those present. It must be remembered, too, that they had but two or three days of a busy week, with other duties pressing heavily, to prepare for the trial so suddenly sprung on them. It is proper, however, to state that I was informed by a gentleman of unimpeachable veracity, that he met Simpson going from dinner on the day referred to—and probably in less than half an hour after he had eaten it—who complained to him of being sick, and did vomit. This gentleman, because of his unwillingness to be called to the witness stand, avoided speaking of this fact till the testimony was closed.

CLXXVII.—FRACTURE OF THE HYOID BONE. By L. GRÜNDER.—This rare form of fracture is scarcely referred to in any but the most recent treatises on surgery; and hence it is the more essential to consider every new case recorded, in order to complete our knowledge of its symptoms and mode of treatment.

The following case would seem to contradict the generally assumed facility with which this form of fracture may be detected:—

A gardener, aged 63 years, accidentally lost his balance while standing up in a cart, and was thrown out. On being raised from the position in which he was lying, with his face to the ground, he was insensible; about a quart of blood was said to have flowed from his mouth. After considerable shaking by those who had raised him, he recovered his consciousness and power of speech, but was unable to swallow. On being examined by Dr. Gründer, twelve hours after the accident, the patient complained of pains in the neck, and inability to turn his head, although there was not the slightest appearance of injury to the cervical vertebrae. His voice was hoarse and indistinct. On attempting to drink some water, he was seized with coughing, and the fluid was expelled with violence, while the patient stated that it seemed to him as if the water passed directly into his windpipe. On examining the throat and mouth nothing was observed that appeared to afford any explanation of this singular condition, excepting that the epiglottis could not be moved from its raised position or made to close the glottis. The tongue could move in all directions, and no pain or unusual inconvenience was felt on pressing it down with the spatula. The continuity of the hyoid bone seemed perfect, and there was neither crepitation nor any abnormal mobility to be detected. The patient did not complain of pains in the pharynx, or at the root of the tongue. The cartilages of the larynx were uninjured. The same results were obtained at each of the examinations that were made, and the only mode of explaining this mysterious condition seemed that of assuming a disturbance in the functions of the *N. vagus*, or a paralysis or laceration of the muscles of the larynx.

A strict antiphlogistic mode of treatment was enforced, but there was neither inflammation nor ulceration. An elastic tube was employed for administering food, which consisted only of milk, and the medicines prescribed, which were a nitre solution, with aq. laurocerasi, and subsequently a mixture of Glauber's salts. The appetite and sleep were good; the pains in the neck gradually subsided, the head could be moved with ease, and a hectic cough, to which the patient had been subject for many years, was the only thing he complained of. When this apparently satisfactory state had continued for six days, the patient grew suddenly worse. The cough increased in violence and was accompanied with expectoration; there was loss of appetite and rapid prostration of strength; the voice was scarcely audible, and at the end of five days the patient died under symptoms of marasmus.

On opening the pharynx and larynx Dr. Gründer discovered a fracture of the hyoid bone, notwithstanding the apparent contraindications of such an accident. One of the great cornua was fractured and impacted between the epiglottis and the glottis, where it was tightly fixed, and had thus given rise to the erect position of the epiglottis, the hoarseness, and the difficulty of swallowing. There was no other appearance of injury to the larynx and the pharynx. The loss of blood was probably to be referred to the lungs.

The fracture of the hyoid seems in this case to have been caused by muscular action, of which Ollivier d'Angers, who first drew attention to this cause, has given an instance. The impaction of the fractured hyoid between the epiglottis and the glottis, is a phenomenon which does not appear to have been noticed in any other case. [In addition to the four cases of fracture of the hyoid, of Lalesque, Dieffenbach, Auberger, and Marcinowsky, to which Gründer refers, we may further add those of Orfila, Ollivier, and Cazanvielh. (See Malgaigne, 'Traité des Fract.' p. 405).]—*Deutsche Chirurg.-Verein Zeitschrift*, 1850.

CLXXVIII.—ON THE LUXATION OF THE FINGERS BACKWARDS.—Dislocations of the joints of the fingers belong to a class of injuries, which, from their apparent unimportance, frequently present the greatest difficulty to the surgeon, while they expose the patient to the most imminent danger. Dupuytren, amongst others, has recorded many cases in which death ensued from dislocations of the fingers, either in consequence of tetanus, gangrenous abscesses of the fore-arm, purulent infiltration between the muscles of the fore-arm, and purulent resorption.

The structure of the finger-joint seems so simple, that one would be disposed to believe that luxation of the finger back-

wards might be readily reduced by moderate extension; we find, however, that reduction is attended by extreme difficulty, whilst energetic, long-continued tractions frequently give rise to alarming symptoms, and hence it is extremely important clearly to understand the causes of these difficulties, and the means best adapted for their removal. Dr. Michel, of Strasbourg, has prosecuted a series of experiments on the dead body, with a view of investigating the conditions of this lesion, to which we shall revert after giving several cases recorded by Dr. Michel in his report of D. Sedillot's clinical practice.

Case 1.—A labourer, who had fallen with the whole weight of his body on his extended left hand, was brought into Sedillot's ward in consequence of his having experienced pain and immobility of the little finger, which appeared somewhat shortened, and appeared in a state of slight flexion. The base of the finger-joint presented a sensible protrusion on the dorsal side, while the head of the metacarpal bone could be felt in the hollow of the hand. The swelling at the seat of the dislocation was still inconsiderable. Extension and counter extension were attempted, but without any result; for although the shortening of the finger and the deformity disappeared during the operation of extension, the finger returned to its false position the moment the traction was discontinued. The patient was brought under the action of chloroform, and energetic tractions continued for a long time without any result. M. Sedillot then changed his method of reduction, and without extending the finger bent it violently backwards (hyper-extension, dorsal flexion) till the surfaces of the joint came in contact, when he bent the finger quickly towards the dorsal surface of the hand, whilst the metacarpal bone remained fixed. This method proved perfectly successful in effecting a complete reduction. The dislocation did not recur.

Case 2.—A boy, aged 11 years, fell off a few steps on the outstretched thumb of his right hand. The medical man called in to see the child detected the luxation, and adopted various means for reducing it, but to no purpose. When seen by M. Sedillot, the finger was only shortened by a few millimetres, and was easily bent. The dorsal surface of the hand showed a considerable degree of swelling, and the base of the bone, which was dislocated somewhat backwards and outwards, might be felt. The head of the metacarpus protruded into the palm of the hand. M. Sedillot's attempts at reducing the dislocation proved unavailing until he bent the thumb backwards, and then rapidly flexed it.

Case 3.—A boy, aged 12 years, had the thumb of the left hand dislocated in holding his hand behind him to screen himself against a blow aimed at his back. The thumb was dislocated and somewhat shortened; the base of the phalanx inclined backwards, and the head of the metacarpal bone protruded forwards. The child was brought under the influence of chloroform; the ordinary modes of traction proved unavailing until M. Sedillot had recourse to hyper-extension and sudden flexion, which immediately effected a complete reduction of the dislocation.

Case 4.—A young man, who had fallen on the little finger of his outstretched right hand, exhibited a dislocation backwards of the last phalanx of the little finger, whose base lay above the second phalanx. The symptoms of the dislocation were strikingly evident. A moderate traction of the last phalanx proved sufficient to reduce the dislocation.

Irreducible dislocations of the fingers are not limited to the thumb and little finger, and the metacarpo-phalangeal joints, as is shown by the observations of Gerdy, Biechy, and others; but it may be safely asserted that dislocations of the first joint of the thumb are the most frequent, and at the same time the most difficult of reduction.

Dr. Michel, in his experiments on the dead body, was able by hyper-extension, to produce dislocation backwards, in all the joints of the fingers, and although the dislocations thus induced, readily admitted of reduction in most instances, there were some cases in which the ordinary modes of traction proved unavailing. The following results were attained from a comparison of those lesions in which it was found difficult to reduce the dislocation. The extensor tendon, although uninjured, was found to be bent inwards; the posterior part of the joint was perfect; the muscles inserted into the first joint of the thumb were pushed aside, the head of the metacarpal bone stood between them. The flexor tendon lay upon the head of the joint, and the synovial sheath was torn at this point. The anterior capsule had been torn from the neck of the metacarpal bone, and thrown backwards with the dislocated joint; the lateral ligaments lay in folds, but were otherwise uninjured. Dr. Michel observed that this torn ligament was brought between the surfaces of the joint, by the traction used in reducing dislocation, and consequently the luxation was reproduced on the removal of the traction. If an incision were first made in the posterior capsule, the reduction was instantane-

ously effected, accompanied by a perceptible noise. The branches of the nerves were pressed on by the head of the metacarpal bone, a circumstance that explains the pain attendant on these lesions. In all those dislocations of the thumb which readily admitted of reduction, the anterior ligament at the base of the thumb-joint was lacerated, and could not therefore interpose between the surfaces during the traction.

In dislocations of the little finger in the metacarpo-phalangeal joint, the flexor tendon was always found to be pushed somewhat towards the radiate side. Here, too, the inability to reduce the lesion depended on the anterior capsule being lacerated. Where the laceration affected the neck of the metacarpal bone, there was interposition, while slight traction was sufficient to reduce the dislocation, where there was laceration of the anterior capsule, at the base of the dislocated phalanx. Dislocations of the fingers were easily reduced in old men, in consequence of the obstacles presented to interposition by the rigidity, hardness, and thickness of the walls of the capsule.

Dr. Michel regards the mechanism of the interposition of the anterior capsule as extremely simple. Hyper-extension of the finger lacerates a portion of the anterior capsule, which is forced between the surfaces of the joint by atmospheric pressure. It is further necessary that this lacerated portion of the capsule should be below the under surface of the joint, or it would be too short to reach the dislocated phalanx and the surfaces of the joint. Opening the joint backwards proved the connexion between interposition and the action of the air, by the immediate removal of the former. In cases where such an opening is not effected, traction increases the interposition by forcing the anterior capsule further between the surfaces of the joint. Simple traction may, therefore, reduce a dislocation where there is no interposition, while in the latter case, such a method will only increase the difficulty. M. Sedillot appears to have acted empirically without comprehending the reasons in favour of the method he so successfully employed. It is evident that, by his method of hyper-extension, the interposed capsule was pushed forwards, while the surfaces of the joint were also moved forwards by a lever-power, and made to carry the capsule with them as they lapped over each other during the traction and flexion of the finger.—*Schmidt's Jahrbücher der gesammten Medicin.* 1850.

CLXXIX.—**CASE OF Erysipelatous LARYNGITIS, IN WHICH TRACHEOTOMY WAS PERFORMED.** By JOSIAH SMYLY, A.B., Surgeon to the Meath Hospital and County of Dublin Infirmary, &c.—When erysipelas attacks the throat and spreads to the larynx, it causes cedema of the glottis, closing the rima, and suffocation must be the result, unless an opening be made in the trachea for the admission of air into the lungs.

Tracheotomy, as warranted in such circumstances, is spoken of by authors in terms so discouraging as to deter the surgeon from the performance of it; and my object in narrating the following case is to show that erysipelatous laryngitis is not so hopeless as we are taught to consider it, and that, even under unpromising circumstances, a happy result may be obtained by having recourse to this operation.

Professor Porter, in his admirable "Observations on the Surgical Pathology of the Larynx and Trachea," at page 95 of the second edition, remarks as follows:—"It occasionally happens that erysipelatous inflammation attacks the larynx and trachea, and produces symptoms of dyspnoea of a singularly formidable character. In the winter of 1835-36, erysipelas prevailed to a very considerable extent in the Dublin hospitals, and many examples occurred of its seizing on the throat, either by apparently spreading to it from the head and face, or by some species of metastasis, the disease subsiding externally on its engaging the internal structures. Amongst all these cases I have not heard of a single recovery; neither do I suppose such to be possible, considering the low and typhoid character of the fever. In most of these, the submucous cellular tissue was found extensively infiltrated with putrid matter. I am not at this moment aware that bronchotomy was performed on any of these patients, although I know it was proposed with reference to three; and, if it had been, I cannot by any means imagine it could have been attended with success."

Again, at page 97, he says:—"In the absence of evidence of incurable disease, the surgeon is right who seeks to relieve the prominent and distressing symptoms of difficult respiration. He fails, certainly, but he does so with the consolation of having performed his duty to the utmost of his ability."

Mr. F. Ryland, of Birmingham, writing in 1837, illustrates the pathology of erysipelatous laryngitis by seven cases; with regard to the operation he says, at page 31:—"We cannot anticipate much success from the operation in cases of erysipelatous laryn-

gitis, because the erysipelas, having existed for some days previous to its attacking the larynx, will have considerably lowered the powers of the system, and perhaps impaired the condition of the brain. Whether these results might be prevented by the early performance of the operation in question is at present doubtful; but, considering the inadequate relief afforded by other means, it would be right to give the patient the benefit of the doubt."

On the 18th of May, 1850, I was called upon to visit Mrs. S—, aged 63, who was supposed to be on the point of suffocation. I was supplied with the following history of her case by Dr. Leech, who was previously in attendance on her. On the 11th of May she had feverish symptoms, and on the 14th complained of soreness of her throat. Her daughter had just recovered from diphtheritis affecting her mouth and throat; and this appeared to be a similar affection. On the 16th, Dr. Leech was called in; she had then great difficulty in swallowing, and her breathing was slightly affected; the larynx was tender to the touch, and the inside of the mouth and throat was covered with a white membranous coating. Leeches, calomel, and Dover's powder, and a cathartic, were prescribed.

18th. All the symptoms were aggravated; she complains of soreness in one nostril, and stiffness of the eye-lids, and her breathing became so laboured towards evening that a consultation was requested, to consider the propriety of opening the trachea; but leeches and calomel, prescribed in the mean time, were followed by such relief that it was considered prudent to defer the operation till the following morning.

19th. Early this morning her breathing became so difficult that immediate suffocation was dreaded; the erysipelas had extended from the nostril to the face, engaging the nose and right eye-lid; her distress was so great that she eagerly embraced the hope of relief that was held out to her by the operation; her sufferings were greatly aggravated by the swollen state of the epiglottis, which was incapable of performing its functions, so that fluids made their way into the glottis, bringing on violent struggling for breath. The distress she suffered from this was so great that, notwithstanding a burning thirst, she had abstained altogether from fluids for the last twenty-four hours.

At 10 o'clock, A.M., assisted by Dr. Leech, Dr. Davy, and Dr. Barker, the operation was performed, and a silver canula was inserted into the trachea, when immediate relief from all the urgent symptoms was obtained.

20th. Breathes freely through the canula; slept a good deal during the night. The erysipelas has spread, and extends all over the right ear, where the cuticle is raised in blisters. Fluids taken by the mouth still get into the larynx, and are discharged by the canula; they do not, however, now cause the same paroxysms of suffocation. She was ordered bark and wine.

21st. Erysipelas extending; pulse 120.

23rd. Improved; had a good night. Erysipelas has not spread since yesterday; the whole face is now engaged; no raving; pulse 108; strength increased. The rima glottidis seeming to be open, the canula was withdrawn. Liquids can now be swallowed without difficulty.

24th. Breathes freely, both through the rima and wound, which has been left open; had a restless night; pulse 120; is drowsy, and slightly delirious.

25th. Had a good night; pulse 92; great drowsiness.

29th. Has continued steadily to improve since last report. The lips of the wound were drawn together with adhesive plaster this day.

December, 1850. It is now more than six months since the operation was performed, and Mrs. S— has enjoyed excellent health from the time of her recovery, and has felt no inconvenience whatever resulting from it. The wound healed readily, and she convalesced rapidly after the last report given above.—*Dublin Quarterly Journal*, Feb. 1850.

CLXXX.—ON THE ORIGIN AND DIFFERENT MODIFICATIONS OF THE COATINGS OF THE TONGUE. By DR. MIGUEL, of Hanover.—Many otherwise healthy individuals exhibit, more especially in the morning, a coating on the back part of the tongue, which may, according to Dr. Miguel, be regarded as *normal* in its character. This coating is generally of a yellowish white colour, moist, and loose in its texture, extending in the form of an arch, with the convexity forward, from the posterior third of the tongue towards the front, where it gradually disappears. When examined under the microscope, it is found to consist of the following elements:—

1. *Epithelium*, which constitutes the largest proportion of this coating, usually in the form of large epithelial flakes in the mucous membrane of the tongue, although other forms occasionally proceed from different portions of the cavity of the mouth. These

epithelial scales are found arranged together either in their normal condition, or under the most various modifications, while some are filled with globules of fat, others present brownish finely granular contents.

2. An innumerable quantity of small rod-shaped prisms (*Stäbchen*) identical with the structures found by Leeuwenhoek in the tartar on the teeth. They are insoluble in acids and alkaline solutions, and would appear to be gradually formed in the locality where they are found.

3. Large brownish flakes of a striated appearance, varying in size and form, and consisting of the above named epithelium, an amorphous, adhesive mass, and granular brown pigment; the latter either fills the epithelial scales, or is embedded among the constituents of the flakes, and is probably altered blood pigment, which is gradually transfused into the mucous membrane of the tongue, and is probably associated with other granular substance. Acetic and hydrochloric acids do not alter it, but a potash solution appears partially to dissolve it, or, at any rate, to render it more colourless.

4. Fatty globules, with occasionally a few crystals of cholesterine.

5. Salts of lime are generally observed on applying hydrochloric acid.

6. Small *vibriones*, remnants of food, macerated muscular bundles, starch granules and vegetable tissue.

The solid constituents of all the secretions of the cavity of the mouth are thus more or less replaced by this coating, which owes its origin to the evaporation of the aqueous constituents of the saliva. The function of the saliva, it must be remembered, is to dissolve or hold in suspension, by its large amount of water, all the solid constituents of this secretion, and to carry them into the digestive canal. If, in its passage, the saliva should lose its aqueous contents, by means of rapid evaporation, it will necessarily leave a great portion of its own solid constituents, as well as the other solid matters it had previously held in solution. Such evaporation occurs during respiration, in those portions of the tongue over which the air passes. During the process, usual to most persons, of breathing through the nose, the current of air passes over only the posterior portion of the tongue, where, moreover, the unevenness and roughness of the mucous membrane of the tongue, from the subjacent papillae, is the most likely to retain the solid parts brought in contact with it. This coating is the thickest in the morning, on the one hand, because respiration is carried on undisturbed at night through the nose; and on the other, because by day many circumstances occur which either cause it wholly to disappear or variously modify it. It will be removed by an energetic secretion of saliva, and it may thus be easily made to disappear by placing a grain of quinine in the mouth, in the morning. A similar result is induced by the use of pungent food and drinks. Dr. Miguel further regards the causes of anomalous coating of the tongue to consist principally in an alteration of the mode in which the air is admitted in respiration, and an increase, diminution, or change in the secretion of the saliva.

While, as already observed, respiration is effected in most persons, when in health, through the nose, it is also performed through the mouth in different morbid conditions (as, for instance, in stoppage of the nares and in most pulmonary diseases), and also in certain individuals, either from habit or some unassignable cause. In this mode of breathing, the tip of the tongue, which is protected by the under lip and lower teeth, is not touched by the current of air, and thus we find that this part is free from coating. The thickest portion of the covering being along the middle line of the tongue, from whence it gradually disappears towards the margins, where the current of air is the weakest, and the constant flow of the saliva prevents the adhesion of solid particles.

In paralysis of one side of the face, the air is admitted at one side of the mouth only, and on this may, perhaps, depend the limitation of the coating to one half of the tongue, as often observed in these affections.

Alterations in the different secretions of the cavity of the mouth give rise to different modifications in the coating, which again assumes different appearances according to the length of time it continues on the mucous membrane of the tongue. An increase in the mucous secretion without a corresponding augmentation of saliva, must necessarily give rise to a furring over the tongue, which is, therefore, an accompanying symptom of the most varied forms of disease, and occurs in catarrh of the mucous membranes of the respiratory organs, and in the incipient stages of many febrile affections.

The coating observed in dyspepsia, although generally confounded with the one above described, is essentially different from it as well in form as in the immediate cause of its origin. It is usually of a yellowish colour, presenting prismatic bodies, and flakes under the microscope, which prove that it does not depend

on a fresh peeling of the epithelium from the mucous membrane of the tongue. It occurs in that form of indigestion in which the buccal fluids exhibit an alkaline reaction; whilst where there is a tendency to acidity, the tongue is generally moist and red. In the first form of disturbed digestion, there is considerable diminution of the salivary and gastric secretions, as shown by the dryness of the mouth, and the hardness of the faeces. The coating of the tongue observed in acidity of the stomach, although of rare occurrence, or appearing only in children, must also be explained by the increased quantity of epithelial scales thrown off from the mucous membrane; but here the point and edges of the tongue are in general perfectly cleaned by the passage of the increased flow of saliva.

The thick furry coating of the tongue observed in salivation, depends, according to Dr. Miguel, on the *Glossitis mucosa* which accompanies this condition; and is characterised by a large number of fat-globules, granular fat, imperfectly developed epithelial cells, and some cholesterine crystals. It exhibits the same relation as the secretion of other mucous membranes when in excess.

These coatings may all assume various appearances after being long exposed on the tongue, and usually change from a yellowish to a brown colour. This is especially the case in the catarrhal coating, observable as a sequela of acute diseases; and is to be ascribed, according to Dr. Miguel, to the cessation of this as well as of most of the other secretions in the torpid stages of disease. The coating already formed on the tongue is removed with the subjacent salivary secretion, and a quantity of blood pigment then gradually exudes on the mucous membrane of the tongue, and becomes deposited as a granular matter on the epithelia, or forms an independent structure. Dr. Miguel does not venture to determine whether this blood pigment reaches the mucous membrane of the tongue by transudation from the vessels, or in consequence of the laceration of some of the capillaries; he inclines, however, to the former view, and it seems certain that this transudation bears a definite relation to the dryness of the tongue. When, after a favourable turn in acute diseases, the secretions from the skin and kidneys are increased, there will be fresh epithelia thrown off from the mucous membrane of the tongue, as well as increased salivary secretion. The previous brown coating assumes a more whitish colour and the tongue becomes moist, which is regarded as a favourable indication.

The black or soot-coloured coating on the tongue depends on essentially different causes, and originates in a rapid dying off of the epithelial layers nearest to the surface, and on the laceration of small capillaries running at the surface. When examined under the microscope, it is found to consist of connected epithelia of a uniform brown colour. The cause of this blackness of colour seems very uncertain; but the dying and peeling off of the epithelia would appear to depend on the cessation of the nutrition of the outer epithelial layers arising from general prostration of the system, and also in part on the dryness of the tongue, which by inducing an unnatural pressure on the minute capillaries at the surface, causes them to burst and discharge their contents below the outermost epithelial layer, which is thus raised in the form of a bladder and broken. A similar process may be better observed on the mucous membrane of the lips, where it is induced under similar conditions to those of the coating of the tongue, or from purely local causes, as the action of cold, a cutting wind, &c. Dr. Miguel found the mucous membrane at first flaccid, a yellowish colour; after the appearance of rugæ, portions of the epithelial layer now become detached, there is slight extravasation of blood, and black deposits appear on the lips. When these arise from local causes alone they are easily arrested by protecting the mucous membrane by a little grease or fat; but when they occur in acute diseases, together with this black coating of the tongue, they must be regarded as an unfavourable symptom, since the arrested nutrition of the epithelial layers gives evidence of extreme prostration of the general system.—*Prag. Vierteljahrsschr.* 1850.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

(From the Registrar-General's Report).

It is matter of regret that this return exhibits a condition of the public health in London still more unfavourable than was reported in the previous week. The widely-diffused illness, which has become the subject of common observation, produced in the week ending last Saturday, 1,401 deaths, a rate of mortality exceeding that which usually prevails at a season of the year more inauspicious than the

present. The deaths rose to 1,213 in the middle of February, when the weekly increase began; then having declined to 1,148, they rose in the last two weeks to 1,247 and 1,401. The epidemic influenza of 1847-8, which quickly swelled the mortality of one week to more than 2,400, had nearly disappeared in March of the latter year; but its effects were still visible in the returns, and the number of deaths was then 1,118, the highest in the ten weeks (of 1841-50) which correspond to that ending last Saturday. The average of the ten corresponding weeks was only 993, or, corrected for assumed increase of population, 1,083; on which the present return shows an increase of 318.

The prevailing complaints are bronchitis, pneumonia, and that specifically described as "influenza;" and the following tabular statement will show the degrees in which these have increased the mortality above the average, both to aged persons, who have suffered most, and also at the earlier periods of life:—

Ages.	Deaths registered last week.	Deaths in previous week (ending 8th March).	Average of ten corresponding weeks 1841-50 (corrected for increase of population).
From birth to 15th years -	593	570	470
" 15 to 60 - - - -	442	374	370
" 60 and upwards -	365	302	242

In the return of last week the deaths are recorded of 92 persons who had turned 80 years of age; and by far the largest proportion, namely, three-fourths of the whole number, were women.

Amongst diseases bronchitis has produced the greatest number of fatal cases; 171 were attributed to this cause, the number in the previous week having been 160, or double the usual amount at this time. Phthisis or consumption carried off 166 persons last week, whilst the corrected average is 154. The deaths ascribed to pneumonia, which is chiefly fatal to children, are 123; whilst the average is about 90. Hooping-cough has risen to 92, about double the average. Influenza, which in the previous week numbered 15 deaths, has increased to 38. The cases are given in detail below.

Small-pox has declined to 16; measles numbers 29; scarlatina 16; fever 52.

The following case of cholera was recorded:—

In St. Thomas's Hospital, on 12th March, a man, aged 53 years, died of "Asiatic Cholera." He was a labourer at the Indigo warehouse, London Docks, and resided at 13, Wilmot's-buildings, White-street, St. George's, Borough, "to which confined neighbourhood (says the Registrar) the body was removed."

In this return no fewer than six deaths are ascribed to intemperance, not cases of fatal injury received after excessive indulgence, but those in which a habit of drinking has produced apoplexy or other disease; a man of about 40 years, who was carried to the Strand Union Work-house, had been found speechless, and died of disease of the lungs, and exhaustion from cold and want of sufficient food; and two cases are mentioned in which health was destroyed by pecuniary embarrassment. The impure air of the room in which the patient breathed is also mentioned in one instance as an accelerating cause of death.

The births of 770 boys and 763 girls, in all 1,533 children, were registered in the week. The average number of six corresponding weeks in 1845-50 was 1,435.

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29.650 in. The mean temperature of the week was 40.5 deg., which differs little from the average of the same week in 10 years. At Lewisham, rain fell to the depth of 1.72 in. on Saturday, between the hours of midnight and 5 p.m. This fall is unusually large at any time, but particularly in March.

Deaths from Influenza registered last week,

Paddington, 12, Cambridge-street, 10th March, widow of gentleman, 72, influenza (8 days).

Brompton, 7, Queen's-buildings, 8th March, wife of master-tailor, 73, influenza (17 days).

Hammersmith, 5, York-place, 8th March, wife of omnibus-driver, 35, (12 days), premature labour, bronchitis (10 days).

Chelsea, 6, Hemus-terrace, 9th March, spinster, 53, influenza, congestion of lungs (3 days).

Chelsea, 3, Draycote-terrace, 8th March, widow of hatter, 79, influenza (7 days).

Hanover-square sub-district, at 70, Lower Grosvenor-street, 10th March, gentlewoman, 80, influenza, bronchitis.

Mayfair, 25, South-street, 6th March, widow, 76, disease of heart (some years) influenza.

Westminster, 8, Red Lion Alms-house, 9th March, widow of publican, 70, chronic bronchitis, emphysema, influenza.

Charing Cross, 7, Blue Cross-street, 8th March, widow of blind-maker, 79, chronic bronchitis, influenza (10 days).

Cavendish-square sub-district, 9, Henrietta-street, 5th March, spinster, 81, influenza, bronchitis.

Marylebone, 53, Manchester-street, 8th March, gentleman, 75, influenza.

Marylebone workhouse, 12th March, female servant, 70, influenza, bronchitis.

At 22, Bryanstone-square, 6th March, gentleman, 80, general debility (some years), influenza, catarrh.

Regent's-park, 8, Stanhope-terrace, 9th March, wife of gentleman, 72, influenza.

Islington, 5, Payne-street, 12th March, widow of attorney, 75, influenza (5 days).

Islington, 3, Barnsbury-street, 14th March, widow of gentleman 92, influenza (1 week), age and decay.

Holborn district, 47, Liguorpond-street, 13th March, widow, 79, bronchitis, influenza, pneumonia, (5 days).

Pentonville, 44, Henry-street, 7th March, wife of gentleman, 84, influenza, bronchitis (5 days).

Whitechapel, 14, Swan-court, 8th March, wife of tailor, 54, influenza, gout, acute bronchitis (6 days).

Shadwell, 2, Brewer's-court, 13 March, coal-whipper, 40, influenza (10 days).

Mile End Old Town, 100, York-street, 9th March, widow of cabinet-maker, 64, asthma (many years), influenza (17 days).

Limehouse, 5, Catherine-street, 8th March, sail-maker, 63, influenza.

Limehouse, 10, Nightingale-buildings, 11th March, wife of labourer, 67, influenza.

Limehouse, 1, Catherine-terrace, 11th March, carpenter, 36, influenza, pneumonia.

Limehouse, 51, Ropemakers'-fields, 14th March, wife of labourer, 34, influenza.

Bromley Mill Cottage, 10th March, son of labourer, 1, influenza (8 days).

Bermondsey, 16, Salisbury-street, 10th March, widow of labourer, 52, influenza, phthisis.

Borough-road Workhouse, widow, 65, influenza.

Walworth, 3, Trafalgar-street, 9th March, daughter of a journeyman plasterer, 2, influenza, pneumonia.

Lambeth, 70, Princes-street, 6th March, shopkeeper, 60, influenza, bronchitis (6 days).

In the same house, 9th March, wife of the above, 70, chronic bronchitis, influenza (5 days).

Lambeth, 14, Hercules-buildings, 7th March, daughter of a carpenter, 4, influenza (2 weeks) typhoid fever.

Brixton, 10, Church-row, 6th March, son of a stationer, 1½, influenza (9 days).

Clapham, Nelson-grove, 14th March, wife of master painter, 27, influenza, pleurisy (10 days).

Camberwell Workhouse, 9th March, costermonger, 60, influenza.

Deptford, 8, Old King-street, 13th March, mariner, 29th, asthma, influenza.

Greenwich, 9, Union-street, 10th March, wife of pensioner, 76, natural decay, influenza (8 days).

Charlton, Lee-road, 12th March, grocer, 23, influenza, typhus (23 days).

Lewisham, 8th March, widow of brickmaker, 54, influenza (8 days), hydrothorax.

APOTHECARIES'-HALL.

The following are the names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 13th, 1851:—David Pestell Thomas, Ravenstone, Leicester; John Wright Baker, Derby; Thomas Plunket, Edinburgh; Martin Brydon Lamb, Forfar county; Johnson Martin, Lancashire.

ST. GEORGE'S HOSPITAL.

Mr. Sergeant Thompson, one of the Treasurers of the Hospital, has presented to the Council of the Medical School, a splendid silver medal, the work of Mr. Wyon, to be given as a classical prize to the most deserving pupil of St. George's Hospital. The medal on one side has the portrait of John Hunter, who in the institution earned his lasting fame, and on the other the elevation of the hospital.

The Council, through their Secretary, Mr. Guming, have forwarded to Mr. Sergeant Thompson, the following very appropriate answer:—

"The Council of Governors, acting by special appointment, in charge and direction of the Medical School of St. George's Hospital, acknowledge, with feelings of cordial thankfulness and respect, the communication from Mr. Sergeant Thompson, which it has been their pleasing duty this day to receive and consider.

"In the elaborate and beautiful work of art which Mr. Sergeant Thompson has placed at their disposal, to be given as a prize medal for clinical attainments to the most deserving student in medicine and surgery in the School of St. George's Hospital, the Council cannot fail to recognize the expression of a great educational truth, that the working interests of a public hospital for the relief of the sick and maimed, are of necessity associated with the moral discipline and practical opportunities of those who minister to the suffering poor within its walls—that to the Hospital Physician, Surgeon, and Pupil, every ward is in truth a school—every patient a true professor. In return for the confidence thus opportunely reposed in the Pupils of St. George's Hospital, by its enlightened Treasurer, the School Council do not hesitate to express their confident hope that, under the impulse and encouragement afforded by this most timely and judicious gift, there will be from year to year, in the future academic history of the Hospital, a constant and progressive development of every high professional faculty, in the senior classes of Clinical Medicine and Surgery.

"The Medical School Council, thus gratefully reminded by the forward energy of their colleague, of their own important trust, may be permitted further to assure Mr. Sergeant Thompson, that their earnest sedulous co-operation will never be wanting to give effect to his generous aspirations for the honour and welfare of the Hospital Student, expressed as they are in letter and design by the medal now within their keeping, which here, in the very birth-place and crowning temple of his fame, sets forth for hopeful thought and use the immortality of Hunter.

"To Mr. Sergeant Thompson,

"General and Joint Treasurer of St. George's Hospital."

It is stated that the die of the medal which is now in the possession of the Council, cost 200 guineas.

NAVAL APPOINTMENTS.

Surgeon-Superintendent William H. B. Jones, M.D. (1837), to the Aurora hired convict-ship.

Surgeon Richard Carpenter (1842), to the Penelope steam-frigate at Portsmouth.

OBITUARY.

On the 12th inst., at Bentineck-terrace, Regent's-park, John James Bowie, M.D., late Assistant-Physician to the Hospital for Consumption, aged 31.

On the 17th inst., at his residence, Weston-super-Mare, J. A. Jacob, M.D.

On Sunday last, at Green Royde, near Halifax, the residence of his mother-in-law, aged 37, James Inglis, Esq., M.D.

On the 15th inst., at his residence, Cross Hayes, Malmesbury, Edmund Ormond Lyne, Esq., surgeon, in the 34th year of his age.

Lately, Assistant-surgeon Stuart, of the Cape Mounted Rifles, killed in action with Sandhill's Caffres, at the Keiskamma River, while under the command of Colonel Mackinnon.

Off the coast of Africa, Mr Symonds, of the "Kingfisher."

At Sierra Leone, Staff-Assistant-surgeon Watson.

At Cephalonia, Brownson, Staff-surgeon Ford, 2nd West India Regiment.

At Dublin, Assistant-surgeon Reed, 4th Dragoons.

Assistant-surgeon Ligertwood, Veteran Battalion.

DEATH FROM TIGHT LACING.

On Monday, Mr. Grindon, coroner of Bristol, held an inquest in that city on the body of a young woman, aged 22, whose death was caused, or at least much accelerated, by the pernicious practice of tight lacing, in which so many of her sex foolishly indulge. The coroner directed that a very careful *post mortem* examination should be made, and the medical testimony clearly showed that the deceased was perfectly free from disease, and that there was no visible cause of death except the compression of the stomach and viscera from tight lacing. The jury returned as their verdict that death was caused by idiopathic asphyxia, hastened by tight lacing.—*Globe*.

M. Etienne has deposited in one of the bureaux of the Legislative Assembly a petition from Dr. Moffat, an Edinburgh physician, well known in the medical profession by his various writings, requesting permission to practise amongst his countrymen. This petition, which will decide a point of great importance, has excited much interest in the Assembly.

NOTICES TO CORRESPONDENTS.

Communications have been received from—

DR. SUTRO, Broad-street Buildings.

P. P.

G. KING, Esq., Bath.

E. OKE SPOONER, Esq., Blandford.

G. J. SQUIBB, Esq., Orchard-street.

A German Physician.

R. HARDEY, Esq., Hull.

JAMES GLAISHER, Esq., Dartmouth-terrace.

DR. DAY, St. Andrews.

A General Practitioner.

DR. TILT.

FRANCIS DAVIS, Esq., Pershore.

JAMES F. TOMLINSON, Maldon.

J. H. GRAMSHAW, Esq., Gravesend.

To whom the Editors desire to return their best thanks.

MEDICO-METEOROLOGICAL TABLE FOR THE WEEK ENDING MARCH 15, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRIC RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Station above the Level of the Sea.	Mean reading of the Barometer, corrected and reduced to 32° Fahrenheit.	Highest Reading of the Barometer.	Lowest Reading of the Barometer.	Range of Barometer Readings.	Mean elastic force of Vapour.	TEMPERATURE OF AIR.						MEAN TEMPERA- TURE OF		Mean weight of a cubic foot of Air.	Mean amount of Cloud. 0-10	AUTHORITIES AND NAMES OF OBSERVERS.		
									Highest.	Lowest.	Range of Tempo- rature in the Week.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean.	Evaporation.				Dew Point.	
Jersey.....	49° 11'	2° 6' W.	75	29.834	30.178	29.706	0.472	0.267	56.0	37.0	19.0	53.1	39.4	13.7	46.1	8.11	0.65	0.825	542.1	3.4	Rev. S. King, F.R.A.S., M.B.M.S.
Guernsey.....	49° 33'	2° 40' W.	123	29.752	30.006	29.630	0.376	0.282	51.0	40.5	10.5	59.0	41.7	7.3	44.2	43.1	0.27	0.924	542.9	6.0	Dr. Hoskins, F.R.S., M.B.M.S.
Truro.....	50° 17'	5° 4' W.	55	29.307	30.130	29.520	0.610	0.249	54.0	31.0	23.0	51.4	37.7	13.7	44.9	42.0	0.75	0.795	544.9	5.2	Dr. Barham.
Exeter.....	50° 45'	3° 41' W.	140	29.689	30.064	29.594	0.470	0.256	53.2	31.5	21.7	50.7	35.1	15.6	43.8	41.8	0.52	0.852	542.3	4.0	Dr. Shapter, M.B.M.S.
Southampton.....	50° 54'	1° 24' W.	60	29.732	30.094	29.601	0.368	0.248	51.5	33.0	18.5	48.7	37.0	11.7	42.0	40.4	0.42	0.873	544.5	5.8	J. Drew, Esq., F.R.A.S., M.B.M.S.
Uckfield.....	50° 59'	0° 5' E.	180	29.631	30.020	29.640	0.380	0.228	56.0	29.0	27.0	47.3	33.7	13.6	39.5	38.0	0.37	0.875	545.8	8.2	C. L. Prince, Esq., F.R.C.S., M.B.M.S.
Greenwich.....	51° 29'	0° 0'	160	29.650	30.040	29.620	0.420	0.226	52.0	29.8	22.2	46.7	36.3	10.4	40.4	38.5	0.49	0.847	545.3	—	From Reg-Gen. Report.
Lewisham.....	51° 28'	0° 1' W.	75	29.742	30.002	29.573	0.429	0.246	53.7	29.2	24.5	47.0	33.5	13.5	40.6	39.5	0.27	0.919	546.7	8.4	H. Gordon, Esq.
St. John's Wood.....	51° 32'	0° 1' W.	150	29.651	30.084	29.458	0.426	0.237	53.5	29.0	24.5	47.5	32.9	14.6	39.1	38.2	0.39	0.925	546.8	7.6	G. Leach, Esq., F.Z.S., M.B.M.S.
Radcliffe Observatory.....	51° 45'	1° 15' W.	210	29.583	30.038	29.449	0.389	0.213	52.9	26.8	26.1	48.2	33.4	14.8	40.0	37.5	0.39	0.802	544.6	7.3	M. J. Johnson, Esq., F.R.A.S.
Hartwell.....	51° 49'	0° 51' W.	250	29.495	30.070	29.342	0.412	0.240	53.0	27.3	25.7	47.7	33.2	14.5	40.0	37.5	0.23	0.925	543.4	7.0	Dr. Lee, F.R.S., Treas. R.M.S.
Cardington.....	52° 7'	0° 25' W.	100	29.701	30.086	29.594	0.412	0.227	51.0	30.0	21.0	46.2	33.2	13.0	38.7	37.5	0.30	0.902	545.2	7.3	S. C. Whitbread, Esq., F.R.A.S., Pres. B.M.S.
Norwich.....	52° 37'	1° 16' E.	39	29.768	30.077	29.613	0.364	0.227	50.0	27.0	23.0	45.7	32.1	13.6	38.4	37.3	0.26	0.909	549.8	7.3	W. Brooke, Esq., F.R.A.S., M.B.M.S.
Nottingham.....	52° 58'	1° 10' W.	203	29.603	30.012	29.510	0.402	0.229	54.5	30.0	24.8	48.3	32.1	16.2	38.9	37.1	0.25	0.901	546.2	6.6	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.
Grantham.....	52° 55'	0° 39' W.	240	29.597	30.011	29.519	0.492	0.238	49.0	31.0	18.0	45.5	33.6	11.9	39.3	38.1	0.30	0.902	545.6	7.3	J. W. Jeans, Esq., F.R.A.S., M.B.M.S.
Hawarden.....	53° 11'	3° 2' W.	260	29.346	29.535	29.006	0.529	0.241	51.0	29.5	21.5	48.4	34.7	13.7	40.7	39.3	0.35	0.900	539.4	7.6	Dr. Moffatt, F.R.A.S., M.B.M.S.
Liverpool Observatory.....	53° 25'	3° 6' W.	37	29.752	30.087	29.645	0.442	0.233	49.2	38.1	11.1	47.3	39.6	7.7	41.7	39.5	0.54	0.897	545.7	7.3	John Hartup, Esq., F.R.A.S.
Manchester.....	53° 29'	2° 16' W.	144	29.651	30.099	29.629	0.370	0.221	52.5	31.0	21.5	47.5	35.9	12.5	40.4	38.1	0.42	0.893	545.4	6.3	G. V. Vernon, Esq., M.B.M.S.
Wakefield.....	53° 40'	1° 36' W.	115	29.551	30.050	29.594	0.365	0.215	51.5	24.5	27.0	47.9	30.7	17.2	38.8	36.9	0.45	0.849	547.2	6.5	W. R. Milner, Esq., M.B.M.S.
Stonyhurst.....	53° 51'	2° 28' W.	381	29.328	29.589	29.224	0.365	0.216	49.3	28.7	20.6	46.1	33.4	12.7	39.4	37.3	0.51	0.835	540.7	7.1	Rev. A. Weld, F.R.A.S., M.B.M.S.
Whitehaven.....	54° 38'	3° 25' W.	90	29.557	30.004	29.444	0.460	0.263	49.0	36.0	23.0	47.1	37.9	9.2	42.5	41.4	0.28	0.907	541.1	—	J. F. Miller, Esq., F.R.S., M.B.M.S.
Glasgow.....	55° 51'	4° 15' W.	121	29.547	30.047	29.476	0.450	0.260	50.8	31.6	19.6	48.2	36.5	11.7	41.5	40.7	0.20	0.898	542.1	—	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.
Dunino.....	56° 18'	2° 49' W.	230	29.352	29.650	29.270	0.380	0.241	50.0	31.0	19.0	47.3	34.1	13.2	40.5	39.2	0.32	0.897	539.7	3.9	David Tennant, Esq., M.B.M.S.

The observer at Jersey observes, "the remarks of Dr. Hoskins of Guernsey, in the last number of 'The Insurgere,' do not satisfy my mind as to the facts of the minimum temperature of that island being so much higher than that of Jersey, as shown by the returns. I can readily believe that the range of temperature is less there than here, though, I confess, it surprises me to find it uniformly represented as so much less; and I suspect, from the description given by Dr. Hoskins of the situation of his thermometer, that they must be influenced, to some extent, by radiation from the house and high walls near them. The station at issue is one of some interest in a meteorological point of view, and I beg to add that, in my remarks, I need to you upon the subject, I had not the remotest ideas of impugning the skill and care with which the observations at Guernsey are made, much less of imputing unworthy motives to the observer."

The highest readings of the thermometer in air were 59° at Jersey and Uckfield, 54° at Nottingham, and 54° at Truro.

The lowest readings were 24° at Wakefield, 20° at Radcliffe Observatory, 27° at Norwich, and 27° at Hartwell.

The least daily ranges of temperature took place at Guernsey, 7°; at Liverpool, 7°; and at Whitehaven, 9°; their mean value is 8°; and the greatest occurred at Wakefield 17°; at Nottingham, 16°; and at Exeter, 19°; and their mean value is 16°.

At Truro the mean temperature as found from the observations at 9 A.M. was not accordant with that determined from the maximum and minimum thermometer; on the 14th the reading of the thermometer was noted as 45°, whilst at the same time at Exeter it was 38° only.

WEEKLY MEDICO-METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Feet.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Readings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of the Thermometer.	Mean of all the Highest Readings of the Thermometer.	Mean of all the Lowest Readings of the Thermometer.	Mean Daily Range of the Air.	Mean Temperature of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Humidity.	Mean weight of a cubic foot of Air.	Mean amount of Cloud.	RAIN.	
																				Average number of days it fell.	Average Strength.
Truro and Exeter.....	188	50.31	50.31	29.803	0.283	53.6	31.3	22.3	53.6	31.3	14.7	44.4	41.9	38.4	2.93	0.64	0.824	543.6	6.3	in.	11
Southampton to Hartwell.....	155	51.31	51.31	29.641	0.294	53.2	29.2	24.0	53.2	29.2	13.3	40.2	38.6	36.5	2.72	0.37	0.832	545.3	7.4	in.	4
Cardington to Whitehaven.....	138	52.46	52.46	29.604	0.297	51.2	28.1	23.1	51.2	28.1	13.7	39.2	38.0	36.3	2.71	0.29	0.903	545.8	7.2	in.	3
Manchester to Stonyhurst.....	213	53.40	53.40	29.535	0.245	50.1	26.1	25.0	50.1	26.1	14.1	38.5	37.4	34.4	2.54	0.46	0.886	544.3	6.8	in.	5
Liverpool and Whitehaven.....	243	53.59	53.59	29.535	0.245	50.1	26.1	25.0	50.1	26.1	14.1	38.5	37.4	34.4	2.54	0.46	0.886	544.3	6.8	in.	5
Glasgow and Dunino.....	186	56.4	56.4	29.450	0.251	50.4	31.1	19.3	50.4	31.1	12.5	42.1	40.5	38.4	2.90	0.41	0.872	543.4	...	in.	4
																				...	4

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At **TRURO**, 9th March, A.M., wet; P.M., wet; at night hail showers. 10th, generally fair, with showers of hail and squalls. 11th, A.M., fine; P.M., wet. 12th, generally fair, some passing showers, blowing fresh, cirro-cumulo-stratus. 13th, 8 A.M., early showery, after 8 fine; P.M., fine, fresh; towards sunset cirrus extensive, succeeded by cirro-cumulus and cirro-stratus, double lunar halo. 14th, A.M., early misty, after 8 rainy; P.M., showery, night clear, frosty towards morning and showery. 15th, A.M., showery; P.M., fine, blowing fresh; night fair (halo), light wind.

At **SOUTHAMPTON**, 9th of March, fine with high wind, rain at night. 10th, fine, with hail at 1 P.M. 11th, fine; butterflies (saffron and cabbage) appeared. 12th, wet all day. 13th, fine. 14th, fine, cloudy from 5 P.M., the rain fell between 8 P.M. and 8 A.M. of the 15th, amounted to 1.06 in. 15th, fine day.

At **UCKFIELD**, 9th March, overcast morning, fine day, appearance of rain P.M. 10th, Densely overcast with rain, hail and snow with heavy rain P.M., lunar halo 9 P.M. 11th, very fine day; clear evening and night. 12th, drizzling rain all day. 13th, thick fog A.M., fine day; clear evening and night. 14th, fine and warm day; overcast night. 15th, very heavy rain till noon; hail and snow P.M.; overcast night. On the morning of the 14th, there was a remarkable hoar frost, the spicule of the frozen dew being of an unusual length. Very heavy rain fell on the 15th, and all the low grounds were flooded in the afternoon; the greater part of the rain fell in about six hours.

At **LEWISHAM**, the sky was partially clear on the 9th till noon, and afternoon on the 13th; and it was nearly free from clouds during the morning hours on the 11th; at all other times it was overcast. On the 15th, rain to the depth of 1.5 inch fell in twelve hours, between 1 A.M. and 1 P.M. The reading of the barometer decreased from 30.01 at the beginning of the week, to 29.53 on the 10th, at 9 A.M.; increased to 29.93 by noon on the 11th; decreased to 29.59 by 9 P.M. on the 12th; increased to 29.78 by 9 A.M. on the 14th; and decreased to 29.65 by 4 P.M. on the 15th, after which it turned to increase.

At **St. John's Wood**, the 9th and 10th were dull; the 11th was fine; the 12th was wet; fog on the 13th. A heavy rain commenced at midnight on the 14th, and continued without intermission till 3 P.M. on the 15th; the fall in this time amounted to 1.04 inch. The reading of a thermometer placed on grass, with the exception of one night, was below 32 deg. on every night. The lowest was 26 deg. on the 26th, and the highest was 35.5 deg.

At **OXFORD**, 9th, overcast; drizzling rain at 10 P.M. 10th, cloudy till 6 P.M.; clear after. 11th, cloudy; overcast after 9 P.M. 12th, rain nearly all day. 13th, clear before noon; cloudy after. 14th, cloudy; rain at night. 15th, cloudy.

At **CARDINGTON**, the 9th was overcast; the 10th was cloudy; rain and sleet in the afternoon; 11th, bright sunshine, cumulus clouds; 12th, slight rain all day; 13th, sunshine; 14th, sunshine and clouds; lunar halo at night; 15th, rain all day. The lowest reading of a minimum thermometer on grass during the week was 20.4 deg. on the 12th. The highest reading of a maximum thermometer placed in the full rays of the sun, on grass, was 93.0 deg. on the 13th. Apricot trees are in full flower.

At **NORWICH**, 9th, fair, with high wind. 10th, showery all day. 11th, showery, A.M.; fair, P.M. 12th, overcast during the whole day, thunder heard at Northam (16 or 17 miles west of Norwich). 13th, thick morning; partially cloudy, P.M.; rain in the night. 14th, fair, morning and forenoon; afternoon, showery. 15th, very heavy rain all day.

At **NOTTINGHAM**, 9th, windy; overcast; rain commenced falling at midnight. 10th, from 6 A.M., rain and snow; cleared at noon; fine afternoon; frosty night. 11th, minimum temperature on grass 25 deg.; fine; thin clouds at night; lunar halo. 12th, rain and snow, some snow flakes nearly 3 inches across; cleared at sunset. 13th, misty early; fine, with hail showers; 11h. 35 m. A.M., hail shower. 14th, some showers of rain and hail; sharp white frost at night. 15th, misty and frosty early; fine day. Wild violets are becoming abundant. Apricots were in full bloom on March 15th; 1850, March 25th; 1849, March 20th; 1848, March 27th; 1847, March 19th; 1846, March 6th; 1845, March 30th; 1844, March 20th—Mean time, March 20th.

At **GRANTHAM**, 9th, slight fog early this morning; a cold day; a few flakes of snow this evening. 10th, sky generally hazy; snow for about three hours this morning; rain at intervals since; the most wintery day we have experienced. 11th, clear, wind fresh; sky hazy, a very fine day. 12th, little drizzling rain; S. a cold drizzling rain nearly all day; slight fog between 6 and 7 P.M. 13th, fog early this morning; a fine day; hail 1 P.M.; a few drops of rain occasionally during the day. 14th, slight haze; fog early this morning, with hoar frost; horizon hazy, quite calm, a very fine day, wind light and very variable. 15th, calm and foggy; moderately fine; P.M. dull; a little drizzling rain.

At **LIVERPOOL**, 9th, overcast throughout the day; rain began to fall at 5 P.M. and continued during the evening. 10th, A.M., overcast, with showers of hail; P.M., one-third of the sky covered with cloud, cumulus and cirrus. 11th, cumulus in the morning; clear from 11 to 4, when stratus appeared in the N.W. horizon; overcast at 5; rain at 8, which continued during the night. 12th, A.M., steady rain; at noon clouds broken; clear from 1 to 4; evening overcast, with haze. 13th, about one-third of the sky covered with cloud till 8 P.M.; overcast afterwards; cumulus and cirrus. 14th, about two-thirds of the sky covered with cloud till 4 P.M.; cirrus and cumulus; clear from 4 to 8, overcast afterwards. 15th, about one-half the sky covered with cloud; cumulus and nimbus.

At **STONYHURST**, 9th, morning fair, cold wind, rain began at 1 P.M., continued at intervals all the afternoon. 10th, rain in early part of night, cold wind, snow on the hills, fair all day. 11th, very bright frosty morning, fine and sunny all day, evening overcast. 12th, drizzle till 10 A.M., rest of the day fair and foggy. 13th, showers of hail and rain in the morning, evening fine. 14th, slight rain in night, morning fair, cloudy; afternoon very fine, evening cloudless. 15th, slight rain in night, fine and sunny during the day, evening overcast.

At **GLASGOW**, 9th, constant small rain. 10th, fine day. 11th, frost. 12th, rain. 13th, fine, with a few drops of rain. 14th, fine. 15th, rain.

At **St. John's Wood**, influenza in various forms is certainly the prevalent disease this week, affecting, in some cases, the mucous membrane of the alimentary canal in the form of diarrhoea; in others, the respiratory organs are the chief seat of the disease, and in not a few accompanied by rather severe inflammatory fever, but all evidently from the same poison. Measles continues, as also rheumatism and bronchitis, with the usual amount of common catarrh.—J. H. ROBERTS.

At **BEDFORD**, no epidemic.—T. H. BARKER.

At **NORWICH**, rheumatic fevers, and derangement of the biliary system, the prevalent complaints of the week.

At **NOTTINGHAM**, neuralgia is prevalent.

At **GUERNSEY**, scarlatina the same, no prevailing disease.

At **TRURO**, the town and neighbourhood are healthy.

At **EXETER**, no particular epidemics.

At **UCKFIELD**, influenza, rheumatism, ophthalmia and hooping-cough are the most prevalent diseases.

Names of Stations.	MARCH.							RAIN.				
	9	10	11	12	13	14	15	Fall in week	Fall in 1st week	No. of days it fell from Jan. 1.		
Jersey	S.E. W. N.W. W. W. S.E. W.N.W.	0.200	0.220	0.580	0.020	...	0.350	1.370	6.500	34		
Guernsey	S.E. N.W. N.W. W. N.W. S.E. W.	0.722	0.027	...	...	...	0.888	1.637	8.265	34	
Truro	S.W. N. N.N.W. N.W. N.W. N.	...	0.550	...	0.380	...	0.150	1.680	12.218	43		
Exeter	S.W. N.W. N.W. W. N.W. S.E. N.W.	0.530	...	0.310	0.050	...	0.050	0.180	1.120	5.800	42	
Southampton ...	S.E. N. N.W. E. W. S.W. N.	...	0.290	...	0.145	0.052	...	1.060	1.547	8.256	34	
Uckfield	S. W. W. S.E. W. W. N.	...	0.500	...	0.130	...	...	1.200	1.830	7.260	31
Greenwich	S. N.W. N.W. S.E. S.S.W. S.S.W. N.E.	...	0.050	...	0.100	0.010	...	1.450	1.610	5.034	34	
Lewisham	S. N. N.W. S.E. S.W. S.S.W. N.E.	...	0.065	0.025	...	0.122	...	1.725	1.937	5.966	37	
St. John's Wood ...	S.S.W. W.N.W. S.W. W. S.W. N.	...	0.060	...	0.200	...	...	1.044	1.300	5.816	32
Fleet-st., London	...	...	...	...	...	...	1.22	...	...	...	...
Radcliff Obs.....	S. W. N.N.W. S. S.W. S.S.W. N.	...	...	0.303	0.187	...	0.223	0.712	...	...	...
Hartwell	S. N.W. N. S.E. S.W. S. N.	...	...	0.181	0.085	...	...	0.266	3.781	25	...
Cardington	S. N.W. N.W. S.E. W. S.W. N.E.	...	0.055	0.110	0.010	0.065	N.E. 0.345	0.585	3.275	29	...	
Norwich	S.E. S. N.W. S.E. N.W. S. N.E.	...	0.060	0.390	...	0.060	0.030	0.130	0.670	3.790	39	...
Nottingham.....	S. N.W. N.W. S. S. S.S.W. N.E.	...	0.355	S.E. 0.391	0.010	0.113	...	0.869	3.549	36	...	
Grantham	S. N.N.W. N.W.S.E. S. W.S.W. W.S.W. N.E.	...	0.400	0.260	0.005	0.190	0.010	...	0.865	3.190	32	...
Hawarden	S. N.W. N.W. S.E. N.N.W. W.S.W. S.	...	0.350	0.100	0.350	...	0.280	...	1.000	5.250	27	...
Liverpool Obs....	S.E. N. N.W. N.W. S. S. S.	...	0.260	...	0.535	0.026	...	0.005	0.827	6.562	32	...
Manchester	S. W.N.W. W. S. N. S.W. S.E.	0.014	0.239	...	0.443	0.045	0.040	...	0.784	5.755	39	...
Wakefield.....	S. W.N.W. VAR. S. W. VAR.	0.303	0.029	0.230	0.210	0.007	...	0.770	1.540	3.983	43	...
Stonyhurst	S. N.W. S. S. W.S.W. S.W. S.E.	0.159	0.101	...	0.302	0.072	0.066	0.074	0.774	10.619	43	...
Whitehaven.....	S. N.E. N.E. S. S.S.W. S.W. W.S.W.	...	0.727	...	0.341	...	0.025	0.252	1.345	14.832	46	...
Glasgow	S. W. W. N.E. S.E. S. E.N.E.	0.150	0.240	...	0.180	0.020	0.010	0.080	0.680	10.059	44	...
Dunino	S. N.W. VAR. S.E. S.W. S.W. S.S.W.	0.02	0.06	0.080	3.990	26	...

The fall of rain on Saturday in the southern counties of England was very remarkable; at Lewisham, it fell to the depth of 1.2 inch in little more than twelve hours, and the roads were covered with water to the depth of two feet. J. H. Beville, Esq., of the Royal Observatory, Greenwich, who has registered the daily fall of rain for nearly forty years, states, that the fall on this day was almost double of that of any day he had registered in the month of March within that time. It will be seen that this unusually large fall was confined to places S. of latitude 52 deg.; at places situated N. of this parallel the day was fine in many places.

At **SOUTHAMPTON**, six males and ten females died within the week, as follows:—

AGE.	CAUSE OF DEATH.	AGE.	CAUSE OF DEATH.
69	Paralysis.	19	Scarlet fever (malignant)
—	Promature Birth.	22	Gastro-enteritis and low fever.
35	Consumption.	2	Pneumonia.
38	Internal abscess.	68	Stricture.
2	Mesenteric disease.	1	Hydrocephalus.
1	Measles.	69	Asthma.
68	Hemiplegia.	2	Scarlatina.
9 months	Measles.	84	Old age.

At **GRANTHAM**, measles, influenza, and bronchitis still prevalent, but decreasing in frequency; ophthalmia more prevalent, and apparently increasing. A few cases of diarrhoea, three cases of pneumonia, one of croup, one of dysentery, erysipelas, and rheumatic fever.

At **HAWARDEN**, 9th March, diarrhoea, one case; epistaxis, two cases; slight attack of influenza, one case. 10th, diarrhoea, two cases, and one of dysentery; menorrhagia, one, with severe uterine pains followed by phlebitis of right lower extremity; sore throat, two cases; influenza, one case. 11th, no new cases. 12th, diarrhoea, one case; influenza, one case. 13th, Pneumonia prevalent among children; toothache, two cases; colic, with vomiting, one case; erysipelas of eyelids, one case; one death from convulsions, and one from pneumonia (children). 14th, no new cases. 15th, premature labour, one, in a case of influenza of two or three days standing.

MANCHESTER, 6 deaths from fever, 4 from small pox, 3 from scarlatina, and 1 from measles. Salford, 1 death from fever, 1 from small pox. The deaths in the week ending 11th March, amounted to 208, being 4 more than those of the preceding week; and the births to 322, as follows:—Manchester, 119 deaths, 193 births; Chorlton on Medlock, 22 deaths, 23 births; Hulme, 23 deaths, 41 births; Ardwick, 5 deaths, 13 births; Salford, 33 deaths, 47 births; Cheetham, 6 deaths, 5 births.

At **WAKEFIELD**, the most prevalent disease has been influenza, and there have been several cases of hooping cough.

At **GLASGOW**, influenza prevalent.

At **DUNINO**, since last report croup, bronchitis, diseases of the throat, and influenza have been prevalent.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

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 1st. To create a higher tone in the public mind towards the Medical Profession, without compromising its honour, standing, or liberal character, and to secure the more regular payment for professional services from that large class of Society who possess the means, but not the disposition, to remunerate Medical Men.

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THE INSTITUTE.

A JOURNAL OF MEDICAL, SURGICAL AND OBSTETRICAL SCIENCE
AND PRACTICE, AND PHILOSOPHICAL GAZETTE.

VOL. II.—No. 13.

LONDON, SATURDAY, MARCH 29, 1851.

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TO THE
PHYSICIANS, SURGEONS, AND APOTHECARIES IN
GENERAL PRACTICE
THROUGHOUT THE UNITED KINGDOM.

We address you as General Practitioners—Under whatever title he may practise, it is to the interests of the General Practitioner *de facto* that this Journal is devoted.

Consider your position as General Practitioners. If, in England, you are Physicians, and practise generally, on the broad basis that medicine and surgery are one science—no matter what your acquirements and talents—you are repudiated by the College of Physicians. You can hold no honourable position in that College. As a corporate body the College of Physicians will have nothing to do with you. Few in number, but of immense influence in the higher circles of society, the privileged Physicians hold you at arm's length, and, as far as their influence extends, by word and deed convey the impression to the public mind, that you are an inferior order of practitioners, and less worthy than themselves of the public confidence. If you are Surgeons, and practise generally, that is to say, if you satisfy the requirements of the public under all circumstances, prescribing and dispensing medicines, performing surgical and obstetrical operations, meeting the exigencies of practice in every emergency, as the great bulk of the profession are compelled to do, not only in this country, but on land and water over the surface of the whole globe, then, you are repudiated by the College of Surgeons, you are deemed unworthy of any honourable distinction, you constitute an inferior order or *membership* of that College; or if, as an exceptional case, you find an entrance into the superior order or *Fellowship*, you are regarded as a mongrel amongst the fellows of purer blood. Lastly, if you are apothecaries, holding the position of general practitioners, after an adequate education and tests by examination legally performing the duties of general practice, no matter what your learning, how skilful and successful your practice, how great your reputation, you are treated still more contemptuously, and the public, as far as the influence of those who hold the highest nominal positions in the profession can extend, are taught to regard you as out of the pale of the legitimate profession; the public are stealthily advised that you are *Apothecaries*, which is but a designation for *tradesmen*; and homeopaths, hydropaths, mesmerists, and charlatans, if they only practise physic "legitimately," which word is rendered by both these Colleges "purely," are deemed more worthy than yourselves. Notwithstanding this, the Physicians, Surgeons, and Apothecaries, practising generally throughout the land, constitute the profession at large.

As General Practitioners you have no head or home except that which you have voluntarily established for yourselves. In the communications between the Government and the Profession, the representatives of the College of Physicians are bound by their duty and by their oaths to regard you as aliens and strangers, and to adhere strictly to the interests of their ancient institution. The representatives of the College of Surgeons are bound by their duty and their oaths to maintain the interest of Surgeons, purely considered, which is literally the interest of the *Fellowship*; as members of the College of Surgeons you can have no weight whatever with the Government, because the College still sustains the fiction of representing the interest of its members, and no Government can acknowledge two parties as representing one and the same interest. Those who represent the Society of Apothecaries are bound to limit their views to medicine, in contradistinction to surgery, and to leave untouched the whole subject of the education of its members in surgery, and their practice as surgeons. As obstetricians, none of the existing institutions recognize you or represent you in the face of the Government.

Look at the existing anomalies. Look at the difficulties and intricacies which beset the Government when it attempts to deal with these anomalies. Let the question be seriously put—What is the remedy for this state of things? Upon various occasions when the Government attempted to legislate for the Profession, it naturally inferred that the College of Physicians, the College of Surgeons, and the Apothecaries' Society, constituted the Profession; but it no sooner took a step in advance, than it found itself woefully mistaken. These institutions were seen neither singly nor collectively to represent the Profession; and this is the reason that, hitherto, no Government has been able to effect any amelioration of the laws by which we are governed.

There is but one remedy for the social evils which afflict the community, and arise out of the present anomalous state of the Profession. That remedy is the establishment of a New and Independent ROYAL INSTITUTE OF COLLEGE OF MEDICINE, SURGERY, AND MIDWIFERY. An Institute or College which shall receive within its pale all the General Practitioners of the present day, and provide for the full and efficient General and Professional Education of those who seek to practise as such in future; which shall regulate the general Practice of Medicine; shall have power to prevent encroachments upon the duties of the Profession by the illiterate and unqualified, and to encourage and reward the cultivation of the Science of Medicine, and the collateral branches of knowledge by its members; shall provide a representative head and an official staff, which, as having been placed in their high and honourable position by the suffrages of the Profession at large, would truly represent to the Government the feelings and the opinions of the Profession, and on all occasions might be appealed to

with confidence by the Government of the day, upon subjects which concern the General Practitioner, and his relation to the public, and to public hygiene. Any government which would grapple with this subject upon a comprehensive basis, and carry it through, would effect a more lasting benefit upon the nation, than the conqueror in a hundred battles, and would deserve the gratitude of generations yet unborn.

The General Practitioners acted with forethought, discretion, public spirit, and consummate talent in organising themselves into a voluntary association; and in the whole course of their proceedings, as a combined body of so many thousand aggrieved individuals in the case of the National Association of General Practitioners. We have recently re-perused the whole of the documents issued by that body. For judgment, temper, a logical display of all the intricate points at issue and of the true bearings of each, and for a lucid development of so difficult and entangled a question as that of Medical Reform, they are master pieces. The General Practitioners have reason to be proud of the proceedings of this Association, and also of those of the National Institute. The colleges, either from a deficiency of talent or a disinclination to display the truth to the world, have proved themselves unable or unwilling to explain, either to their own alumni, or to the profession and the world at large—not only the bearings of the medical reform question—but even their own proceedings in relation to that question; they have never issued any documents that will bear the slightest comparison in point of enlightened views and comprehensiveness with those of the General Practitioners. Although the General Practitioners have not obtained their object, they have still, by their voluntary exertions, secured some considerable advantages.

The National Association convinced the Government that it is not dealing with the Profession when it deals with the existing institutions; the National Institute induced the Government to call for representatives of the General Practitioners in the joint conferences between the different classes of the Profession, and the Profession and the Government. And the justice of the cause of the General Practitioners, as set forth by the executives of these Associations, further determined the Government not to take any step in Medical Reform, without making this class in the Profession a party to the proceedings.

This ought to convince the General Practitioners how much more they might effect by union and cordial co-operation. It is a subject of regret, that a few members of the Association—comparatively a very few—dissented from their brethren. As in all such cases a few active individuals are enabled to cause a much greater appearance of dissent than really exists, and when we find, by the reports of the Journals of the day, that in a meeting of a thousand medical practitioners the dissatisfied portion numbered no more than *seventeen*, we are led to the conclusion that, as a body, the General Practitioners appreciate the immense interests at stake, and are virtually unanimous; and it is consolatory that the Association still exists—intact. We trust, when the proper time arrives, that it will resume its meetings, enlarge its boundaries, complete its organization, sink its differences, re-animate its executive, and, following up the advantages it has already obtained, that it will carry to the chambers of Downing-street the convincing argument, that a unanimous feeling pervades the Profession at large, and that it is determined upon a bold, active, unwearying, endless agitation and warfare, until it has accomplished, for the benefit of the people at large, a complete and efficient measure of Medical Reform.

Remember, Gentlemen, that you are not merely the Profession of an aristocracy or of the court, but the Profession of the millions. It is the population at large which suffers from the existing anomalies in the Profession. We appeal to you not only as members of a liberal profession in a false position among the institutions of the country, but as men and Christians, and we call upon you to agitate for Medical Reform as a religious, as well as a social and political duty. In your capacity as General Practitioners of Medicine, the dearest interests of husbands and wives—parents and children—of whole families—rich as well as poor—are confided to you, individually. If you continue apathetic you are amenable for the continuance of the inconsistencies, and anomalies of the laws as they at present stand, and for the direful consequences which, under your own observation, are daily occurring. On the contrary, your union and co-operation in a combined movement, made with energy and perseverance, will, assuredly, at no distant period, secure their correction, and be rewarded with satisfaction and peace in the Profession, and innumerable advantages to the community.

We beg the General Practitioners to bear in mind, that the Medicine and Surgery which they practice are one and the same Science; that, as General Practitioners, they are totally unknown, unrepresented, repudiated, by the existing medical institutions, and, until a very recent period, by the Government of the country; because, educated in the principles of the Science, they practise the art founded upon it in its universal application to the alleviation and cure of diseases, and the amelioration of the mental and physical ills with which their fellow-creatures are afflicted. This preposterous anomaly—this enormous injustice—as respects, not alone its Professors, but the Science of Medicine itself, has called THE INSTITUTE into existence; and if the feelings and opinions of the promoters of this new Journal prevail, the Profession will never rest until it is corrected.

We have the honour to be, Gentlemen, your devoted Servants,

THE PROPRIETORS

AND

EDITORS OF 'THE INSTITUTE.'

ORIGINAL COMMUNICATIONS.

PRACTICAL OBSERVATIONS
ON THE VACCINATION QUESTION.By E. OKE SPOONER, Esq., M.R.C.S.,
Blandford.

I WAS formerly of opinion, with the most strenuous followers of Jenner, that the occurrences of small-pox after vaccination were to be considered only as exceptional cases. That the great rule was protection, the occasional exceptions not occurring in sufficient numbers, or in sufficient severity, for us to discredit the adequacy of the great Jennerian discovery. A late epidemic of small-pox of nine months' duration in Blandford and its neighbourhood, has shown to me most decidedly the hollowness of my previous confidence, and the insecurity of those who many years ago underwent the process of vaccination. I have not the slightest reason to doubt the genuine character of the vaccine disease to which they had been subjected. Men of practical skill and sound judgment performed the operations, watched the processes, and were satisfied with the results, but in a large number of cases, an interval of twenty years having elapsed from the time of their vaccinations has sufficed to render them susceptible of small-pox when brought into close proximity with those affected by the disease. I know it has been rather too common with medical men to question the due performance of the professional duties of their brother practitioners, and that it is a very easy and ready way to say,—“Oh! this case could not have been properly vaccinated, or that case must have imperfectly developed itself.” The instances, however, are too numerous, and occur in too many cases, where the utmost possible skill, and the utmost possible watching and observation, from men of undoubted character, had been employed in the early vaccination. I have known that many of those who have been vaccinated by Jenner himself, and some of his able successors, have caught the casual small-pox, and that in no mild form.

My experience has taught me that the severity of the disease very much depends upon the period of time which has elapsed since the vaccination. Very few children, recently, or within a few years, vaccinated either by myself or by others, have caught the disease, even when it has been raging in the same house. After an interval of twenty years I have witnessed very many severe and dangerous cases, of a confluent kind, leaving behind very extensive pitting and disfigurement. After thirty years I have witnessed life very narrowly saved; and the Registrar in the practice of others has had to record, in some instances, a fatal issue. I find in unison with the experiments made a few years ago in the Prussian army, that re-vaccination is successful in again producing cow-pox, in a large proportion of cases, when the interval from the previous vaccination has exceeded fifteen or twenty years, so that I have not the slightest doubt the same subjects would have been liable to small-pox, if closely exposed to the infection; and, though in the majority of cases the vaccine vesicle is not quite so perfect in all its characters, in some instances I could discover but little, if any, difference from the first vaccination. I have examined the lymph under the microscope, and have discovered exactly similar cellular bodies, which I take to be the sporidia of the disease. And I have tested the lymph by using it in vaccinating primary subjects, and have found it perfectly successful, and proved it to be so from subsequent vaccination from primary vesicles, as well as by the security it has afforded against small-pox.

The security for a time at least which re-vaccination has afforded in the same houses where the members of the family have been affected with small-pox, I have amply verified in scores of cases, and the insecurity of those who were vaccinated more than twenty years I have so frequently witnessed, that I have not the slightest doubt the results arise from some definite law, and are not by any means exceptional.

I believe I need not now-a-days enter into any argument to prove the identity of small-pox and cow-pox; the experiments of Mr. Ceely have set that question completely at rest. It is by no means the only disease which is capable of developing itself in two different genera of the animal world. Glanders, so ably elucidated by Dr. Elliotson, and hydrophobia so fatally experienced in the various mammalia, are glaring instances of the point in question. The modification of small-pox produced by passing through the cow, disarms the disease of its severity, by rendering it incapable of effluvial propagation. You must insert the germ in its proper nidus—the skin—to produce cow-pox. This constitutes at once its valuable character to the community, whilst its comparative mildness gives it its advantage to the individual.

Dr. Baron, in his interesting ‘Life of Jenner,’ says (vol. 2,

page 254), “It can scarcely in my opinion be doubted, ~~when~~ small-pox has prevailed after cow-pox, that there has been some imperfection in the vaccine process, and that, thereby, another maxim of the author of vaccination is illustrated, which tells us that these imperfections may be propagated, and that they will afford varying degrees of protection, according as they recede from, or approach to, the perfect standard.” And he adds, sceptically:—“I am especially struck with the force of these remarks, when I look at some of the recent accounts from Denmark. From Dr. Wendt’s book it appears that re-vaccination is employed in the Danish army to counteract the contagion of variola. He mentions, that in the year 1835, out of 3,173 persons, between the ages of 20 and 25, 2,175 were successfully re-vaccinated, while 998 resisted the infection. This is an enormous proportion, for every one of the larger number would have been liable to an attack of small-pox. I cannot avoid thinking that the first vaccinations had been imperfect.”

“The results of re-vaccination in the Prussian army have likewise led to the belief, that the susceptibility to small-pox among the vaccinated is annually increasing. Thus of 100 re-vaccinations in 1833, thirty-one were successful; in 1834, thirty-seven; in 1835, thirty-nine; and in 1836, forty-three. How it may be in other parts of the world I cannot say: but I am constrained to repeat, that nothing has happened in this vicinity to countenance such a statement; I cannot, therefore, arrive at any other conclusion than that the defect is not in vaccination itself, but in the manner of conducting the process, or in the employment of imperfect virus.”

I must confess that the experience I have of late years had in England corresponds very much with the Danish and Prussian experiments, though I do not partake of Dr. Baron’s views respecting the cause, inasmuch as I cannot suppose the able physicians of Prussia and Denmark were incompetent to the task of securing the true vaccine process, or would have failed in detecting any abnormal development of the disease. Even if this suspicion—somewhat disparaging and ungenerous—be allowed, we have the important fact that such large proportions of the vaccinated in various countries are susceptible of small-pox, although not in its severest form. I must confess this is a great drawback on the previous confidence which the public and the profession once entertained. The question must be met fairly, and if re-vaccination be required for more complete security, the doctrine must be received by the profession, and the public mind instructed in some degree in opposition to the views of Mr. Newnham. “Since the discovery of small-pox,” says Dr. Gregory, in the article on this disease in the ‘Cyclopædia of Medicine,’ “the milder varieties of small-pox have greatly increased in frequency, so as at the present time to be familiar to every one engaged in practice.” “In a certain limited number of cases, even when the proofs of correct vaccination have been most undeniable, the small-pox has been found to run its regular course, unaltered in its symptoms, and unmodified in any of its features. We cannot, therefore, be surprised if it has sometimes, when so occurring, proved fatal.” The value of variolous inoculation, as formerly practised, in moderating the quantity of eruption and lessening the virulence of the disease, is proved by the fact that only three in a thousand cases proved fatal at the Inoculation Hospital previously to the general practice of vaccination, while three in ten died of the casual disease in the wards of the Small-pox Hospital. Now, if we combine this fact with another, that there is no instance on record, which I have yet met with, of an individual dying of small-pox, when variolous inoculation has produced the disease after vaccination, I think we may very fairly entertain the question,—Whether or not individual life would not be secured and society greatly benefited, if the Vaccination Act be so far modified as to allow of small-pox inoculation, after vaccination, by all legally-qualified practitioners? I would by no means pander to public prejudice, (which I must acknowledge has somewhat increased of late years,) against the practice of vaccination in consequence of the numerous failures of its protective power; neither would I for one moment depreciate the value of the splendid discovery of Jenner, which I think has capable of still further ameliorating the condition of the human race. Vaccination, in my opinion, should be still further extended and sacredly guarded, with all the pious care which the vestal virgins took of the sacred fire of the Temple. None should be inoculated except under extraordinary and special circumstances of exposure to receiving disease in the casual and natural way; but the legislature might fairly allow of the practice of inoculation in well-qualified hands.

There is a remarkable fact noticed by Simon, in his valuable work the ‘Chemistry of Man,’ one of the publications of the Sydenham Society (of which some of us no doubt are, and all of

us ought to be, members, as the books published by this Society are of the highest character of standard works, and remarkably cheap and well deserving of the most extensive patronage of the profession). Simon says (page 127, vol. i.), "that Macgregor ascertained that the air expired by persons ill of confluent small-pox, contained as much as eight per cent. of carbonic acid, and in proportion as health was restored the per centage was diminished to its natural standard. Carbonic acid is also produced during the process of fermentation." Now, I trust it may be fairly concluded, that a change takes place in the constituents of the blood during the progress of small-pox. What the exact nature of that change may be, must be left for future inquirers to determine. Cow-pox appears to effect a similar change by a more gradual and less violent process. That it is less complete and less permanent in its duration than the true small-pox, appears to be indicated by the subsequent renewal of susceptibility to the contagion, which indeed we sometimes, but very rarely, notice after small-pox itself. Now this recurring susceptibility, which appears to increase with the length of the interval, may be again exhausted by a repetition of vaccination, or by inoculation with small-pox itself; and the point which we would more particularly urge on the consideration of the profession is—whether the *post-vaccine* inoculation of small-pox would not afford us a more powerful auxiliary in breaking the force of the disease, than by leaving the community to the chance of casual infection during the progress of an epidemic.

If we examine the small-pox and the cow-pox microscopically, as I have done very carefully in every stage, we find that the essential character consists of a number of minute cells, not exceeding the 10,000th part of an inch in diameter, being about one-fourth smaller than the globules of the blood, containing within their circumference many still more minute nuclei, and presenting beyond their circumference bud-like cells of the same size and character as those contained within the circle. They exactly resemble in every thing except the size, the globules of the yeast plant, the *torula cerevisiæ*, which it is very well known is a species of living organism, requiring a certain temperature, having a definite growth, living and depending on a particular species of food, when it has exhausted which, it ceases to multiply, but if preserved and introduced into a new nidus, containing the saccharine element on which it feeds, reproduces its kind, and continues its half-animal half-vegetable existence. The *torula cerevisiæ* contains nitrogen, and therefore may be considered somewhat allied to either kingdom. Now, if we examine more circumstantially the analogies of what I would call the *torula variolæ* with the *torula cerevisiæ*, we observe the following corresponding facts.

What do we accomplish by inoculation as it is called? Simply this. We take on the top of a lancet, or an ivory point, a few of these minute cells or germs, and we put them into their appropriate nidus, the subcuticular tissue, where, after a few days, if they find their appropriate nutrient elements, they grow and multiply. If those nutrient elements have been exhausted by previous inoculation or vaccination, they infallibly die without reproducing their race. If the previous vaccination or inoculation has not wholly exhausted the material, or if length of time, and the growth of the body through a long series of years, has renewed the original element, they increase in a stunted or modified manner—that is, they run through their whole course of multiplication, and decay much more rapidly—and the process is ended many days before it would have done so in a primary affection. It is just the same with the *torula cerevisiæ*: if the whole of the saccharine matter has been changed by previous *fermentation* into alcohol, no fresh fermentation can be produced by the introduction of the yeast; but if sugar is added, the *torula* grows again with less vigorous reproductive powers; and if the proportion of spirit in the liquid be very great, it is entirely destructive to the living process. I have now under my care a woman, aged nearly seventy, who sixty years ago was inoculated successfully for small-pox, and bears the peculiar mark on her arm, and other specific marks on the body, indicative of her having passed through the disease. She is now recovering from a second attack of casual small-pox. These cases, however, are extremely rare. I have met with three only during the late epidemic.

Now, I would beg to call particular attention to the double mitigation afforded by early vaccination and subsequent inoculation, and for my own part I have never observed a case in which the slightest evidence existed of the inoculated disease, in such circumstances, producing a case severe enough to spread atmospherically. It has then all the mildness of cow-pox itself, and you have the means of producing it close at hand, and in one day may secure a large population from an infection which, if left to itself, will last for months. I am of opinion then, that by using

the discovery of Jenner as the first mitigation, and the inoculated disease as the second, you may completely destroy the virulent character of small-pox, and carry out to its fullest extent those benevolent views which the immortal discoverer fondly anticipated. It is not by a blind adherence to the plans and recommendations of a great man that society and science can advance with sure and progressive steps. New experience throws fresh light upon old questions, and though inoculation has been for some time eclipsed by the noble attempts of the profession and the legislature to realize the wishes of Jenner, "I think it is quite clear, that by rescuing the early and equally magnificent discovery of variolous inoculation from the shade into which it has been cast we should still more immortalize the name of Jenner himself, by removing all the suspicions and prejudices of the people against its exclusive employment, and destroy the force of that feeling which has been provoked against it by its numerous palpable and indubitable failures to produce a permanent security against an attack of natural small-pox. The plan I would propose, then, would be, that every child, within a twelvemonth of its birth, shall be required, under a certain penalty, to produce evidence of its having undergone the process of vaccination. That no child shall be received into any public or private school without such a testimonial or mark, and that subsequent inoculation by a qualified practitioner shall be allowed by the law whenever small-pox is threatened, of the proximity of which due notice shall be given to boards of guardians by district registrars or other proper authorities. That the penalty against unqualified persons inoculating shall continue as it at present stands.

If we take the case of an emigrant-ship, with six or seven hundred passengers of all ages on board, of whom some fifty or sixty may have had the small-pox, while the remainder have been vaccinated only, we may suppose, as has frequently occurred, that the small-pox breaks out when about ten days' sail from the port. Now, by inoculating all who have not passed through the disease, every life may be preserved, and a disease, mild in its character, passed through without leaving a single injury behind; so that in one fortnight every vestige of small-pox may be banished entirely. If the disease is suffered to take its natural course, a few will die who take the disease severely, many will be suffering from intense fever and foul effluvia, with considerable danger, trouble, and anxiety, even when the cases terminate in eventual recovery. It was only a short time ago that a transport ship lost eighty of its men, and was refused pratique at Malta in consequence of a very similar occurrence. Now, all this might have been prevented by the simple process of immediate inoculation. Is it fair to tie up the hand of the surgeon by forbidding him to inoculate? Is it just that the law should interpose with its veto and deprive the crew of the certain means of safety, and leave them for weeks together anticipating a daily accession of fresh cases? It has been objected to inoculation that you hereby spread the disease, but this argument falls to the ground when a ship's crew are threatened far away from land. Now, let us examine for a few moments the very mild character of the inoculated small-pox after vaccination. Never has a fatal case occurred to me, even when no previous vaccination had been effected; very few pustules are even then produced, but in cases where the cow-pox has been previously received, the disease is by the double process so effectually mitigated, that I very much question whether sufficient effluvia or exuviae are produced to give the natural disease to another. Now, the case of the ship may be transferred to the household, and the same line of argument may be adopted to prove the propriety of allowing inoculation at the discretion of the medical practitioner, when the parties have been previously protected by vaccination. The Vaccination Act has now been ten years in operation; for my own part I have seen more of small-pox than in the ten years previous, and I believe my experience corresponds with that of the profession generally. It is vain to hope that the small-pox can be extinguished by the rendering inoculation illegal, it spreads to a more dangerous extent by leaving it to take its own course, and a town or village, of moderate size, instead of getting rid of the disease in a few weeks, as it might do by immediate inoculation of the vaccinated, retains the frightful malady for months, and leaves hundreds of its marked victims, even where it does not appear in the mortality returns of the Registrar-General. I am quite sure the poor generally will be willing to pay for their own inoculation, if the State pays for the primary vaccination, and those who prefer re-vaccination, or are willing to trust to the preservative effects of a primary vaccination, may be left to follow their own course. The liberty of the subject will be by this plan perfectly preserved, and the security of the population against a heavy calamity within the reach of legal investigation.

ON THE APPLICATION OF GUTTA-PERCHA IN THE TREATMENT OF FRACTURES OF THE LIMBS.

AS PRACTISED

By M. A. UYTTERHOEVEN,

Senior Surgeon to the Hospital of St. Jean, Brussels.

*Cases Collected and Reported by Dr. Isidore Buys.**(Translated from the French.)**(Continued from page 234.)*

COMMUNUTED FRACTURE OF THE LEG, CONSEQUENT UPON THE FALL OF A WEIGHT OF ABOUT 1000 KILOGRAMMES.

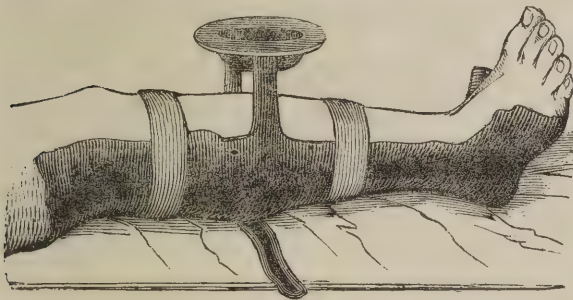
J. Dubois, 21 years of age, street-porter, of sanguineous temperament and very robust complexion, was brought to the hospital of St. Jean, October 25th, 1850.

A piece of iron, weighing about 1000 kilogrammes, had been thrown down, and had struck him on the right leg.

Double fracture; fibula fractured above the middle part; tibia fractured at the inferior third. The superior fragment of the latter bone, broken in pieces, protruded from a large integumental wound, the inferior lip of which was three inches long. It was displaced forwards and inwards under the influence of the strong muscular contractions produced by moving the limb to attempt its reduction, which, however, was found impossible. The bone could not be replaced until an incision, of about an inch in length had been made, and the tendo Achilles divided.

The wound was closed by three sutures, and preserved from the air by bandages of linen steeped in collodion.

The posterior half of the foot, the leg, and the knee, were encased in gutta percha. A compress of many folds was fixed on the tibia over the wound, to preserve it from the pressure of a circular band of gutta, of one piece with the apparatus which maintained the reduction. The irrigating apparatus, of simple construction, and which fully answered the purpose was contrived thus.



Two pillars of gutta, about a foot long attached to the shell, near the point of fracture, rose on each side over the limb, where they joined a little cup, also of gutta, and filled with water. In order to keep up constant irrigation of the wounded part, a small tube of gutta in the form of a syphon was used, one end of which being placed in the water, allowed it to be shed equally, and so to speak drop by drop. An analogous result might have been obtained by perforating the bottom of the cup with a large needle. The aperture thus made furnishes sufficient liquid to preserve the suitable degree of humidity and temperature. A gutter contrived in the inferior and lateral part of the shell conducts the water which flows over the limb into a vessel placed at the side of the bed.

Irrigation was continued for three days, when symptoms of pleuro-pneumonia appeared, but yielded to treatment.

October 30th. The middle part of the leg was the seat of a deposit of purulent matter, which flowed abundantly from the wound on the removal of the collodion plaister and the sutures.

October 31. Delirium, jaundiced skin, pulse feeble and irregular; a considerable quantity of gangrenous cellular tissue was taken from the wound.

November 1st. General symptoms much more favourable. The wound presented a better appearance; but the fragment, freed from the compression which had maintained it, and which had to be withdrawn in consequence of the state of the limb, again endeavoured to escape by the opening.

November 6th. After several ineffectual efforts, the surgeon of St Jean, foreseeing the fatal consequences which must result from the non-maintenance of the superior fragment, in the midst of an open sore, encouraged also by several successful applications of M. Malgaigne's point, determined on having recourse to means which subsequently became most valuable in circumstances of great difficulty. With a pointed ringed screw he penetrated the fragment of bone. He fixed the screw to the apparatus by means a ribbon passed through the ring.

November 8th. The fragment was well maintained; the fistulous abscess yielded less pus and of a more healthy character. The general health had become good. The wound was cleansed twice a day and dressed with a digestive.

November 11th. The wound was covered with granulations, which surrounded the ringed screw.

November 13th. No change; but a shortening of an inch and a half was ascertained.

November 17th. The screw was removed, the coaptation appearing pretty well maintained. Dr. Bougard's apparatus was applied with the view of overcoming the contraction.

November 18th. Erysipelas in the posterior part of the limb.

November 19th. A piece of bone is removed from the wound, proceeding from a different point to that which the screw had penetrated.

November 23rd. The displacement of the bone had become more marked. The compressive screw is again applied, and fixed to the apparatus.

December 4th. Another portion of necrosed bone escaped from the wound, also distinct from the compressed point. Dr. Bougard's apparatus was suppressed, no further attention being paid to the contraction. A shell of gutta percha was re-applied. The dressings were adapted to facilitate the flow of pus.

January 16th. A very small splinter issued from the wound, presenting in the centre a round opening, surrounded by a black circle, indicating the perforation of the screw.

February 17th. The fracture was consolidated; the wound had become fistulous. Application of the starched bandage.

March 8th. A superficial wound continued at the point of fracture. The leg presented decided shortening. At the point of fracture there was an osseous projection, the consequence of imperfect coaptation. The patient was in good health, walked with crutches, and requested to be discharged.

August 19th, 1850. An opportunity presented itself of seeing the patient. At the point of the deformity in the leg, resulting from the projection of the superior fragment within, the cicatrix remained erythematous, and suppurated continually; but the general health was good.

OBLIQUE FRACTURE OF THE LEG.

Jean Francois Willems, 64 years of age, had fallen down stairs in a state of intoxication. The left leg was fractured in the inferior third; he was brought to the hospital, December 11th, 1849.

On his entrance he presented the following symptoms:—

The foot was turned very much outwards; alteration of the axis of the leg, which fell inwards at the internal malleolus; slight shortening of the limb; abnormal mobility at the inferior third; crepitation; projection of the bone very marked, which raised and threatened to penetrate the skin; swelling to a considerable extent; excessive pain on the slightest movement.

The patient was put to bed and the limb placed on a slightly inclined plane, in order to relax the muscles.

A partial reduction was then effected and maintained, by means of the hollowed splints of Benjamin Bell, which were continued until the disappearance of the complications which frequently accompany fractures.

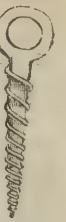
The limb was covered with a poultice.

December 12th. The apparatus of Bell was discontinued. The leg was more swollen than on the preceding day. Recourse was then had to another mode of supporting the fractured limb. A sheet of gutta percha was moulded into a splint on the posterior part of the leg, the foot, and the lower part of the thigh. The anterior surface of the limb was left uncovered, so as to be open to inspection at any moment, and to allow the application of topical remedies.

This splint was suspended from the top of the bed, in imitation of the apparatus of Mayor, by means of four cords attached to the corners.

The poultice was continued.

14th. The patient was in a satisfactory condition. Strict abstinence. The inflammatory redness had disappeared from the point above the fracture, but the fluctuation continued.



16th. The fracture presented marked displacement; permanent extension was judged necessary, and effected in the following manner:—

The same shell of gutta percha was used. A band of the same material embraced the knee, fixing it, and performing the office of counter-extension. A weight, the line of which glided on a pulley fixed to the bed, preserved the extension of the foot. Poultices covering the entire limb were continued for several days.

December 20th. The swelling and inflammation were much diminished. Emollient applications were discontinued, and replaced by infusion of arnica flowers. The fluctuation, however, continued at the point of fracture.

25th. The diminution of the size of the limb revealed at the point of the solution of continuity a splinter of the bone about two inches long, and three quarters of an inch wide, situated in the direction of the axis of the limb, and raising the skin.

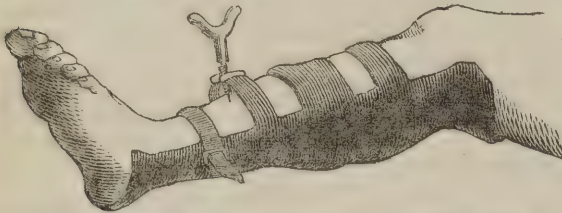
It yielded to the pressure of the finger, and again rose on its withdrawal; its two extremities were easily recognised; it was floating in the contents of the fluctuating tumour spoken of above.

The apparatus of gutta became too large by the shrinking of the limb, and was replaced by a new shell like the first. Extension was continued.

December 30th. The collection of fluid at the point of fracture had almost entirely disappeared.

The splinter continued endeavouring to make its way out, but its separation from the rest of the bone gave ground for fearing that, not being comprised in the callus, it would become an obstacle to consolidation, or at any rate prove a great deformity. M. A. Uytterhoeven then decided on having recourse to Malgaigne's mode of procedure in analogous cases, of fixing the moveable fragment and maintaining it in a state of complete reduction.

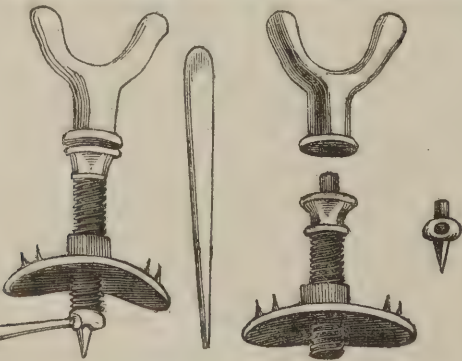
He accordingly took a band of gutta percha, about an inch and a half wide, and from four to five lines thick. He formed with it an arch in the shape of the compressor of Dupuytren, fixing the two extremities to the shell over the point of the fracture. A hole made in the centre of the arch received the screw, which was



furnished with a screw plate, attached by means of four little pins to the concave surface of the same arch.



The screw used differed from that employed by M. Malgaigne, inasmuch as, instead of being in one piece, the point was separate,



capable of being held immovable on the part intended to be depressed. By means of this modification, the tissues at the point under pressure of the screw became directly depressed, without being affected by the rotatory movement of the body of the screw. When, on the contrary, the body and the point of the screw consist of one piece, it produces painful puckering of the skin.

The patient, terrified at the point piercing his leg, complained loudly; but the surgeon was deaf to his lamentations, perfectly satisfied with the excellent appetite with which he saw the dinner consumed half an hour afterwards.

No inflammation supervened, and the complaints of the patient soon ceased.

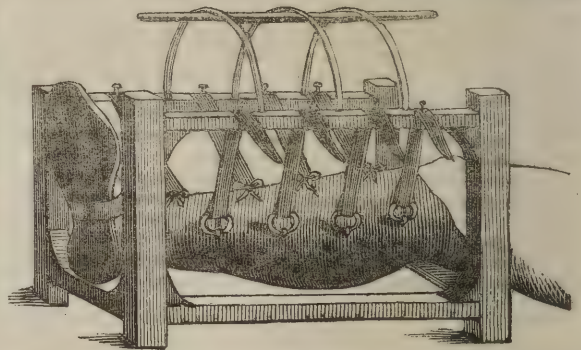
January 16th. The splinter was not again displaced; it appeared to adhere to the subjacent portion of bone. The point of the screw was then removed, and a shell of gutta percha encasing the whole leg like a boot, consisting of two valves, the one anterior, and the other posterior was applied. Nothing of importance occurred from this moment, although the complete consolidation was effected but slowly, owing either to the age of the patient, or to other causes.

OBLIQUE FRACTURE OF THE TIBIA AND FIBULA.

Verspecht, Francois, 35 years of age, cowkeeper, was brought to the hospital, August 11th, 1850. He had been thrown into a ditch by a furious cow.

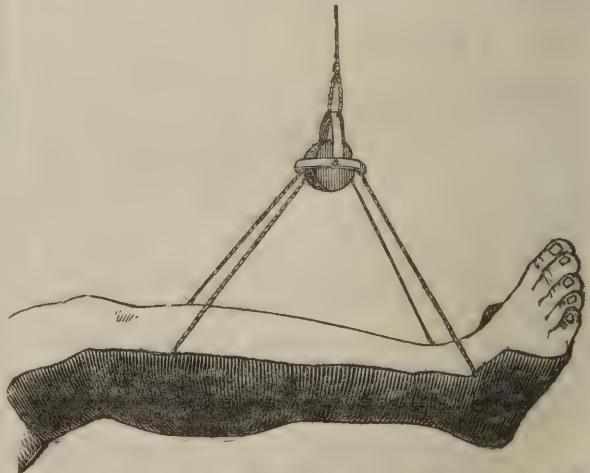
The two bones of the right leg were obliquely fractured towards the inferior third. The inferior fragment had induced a wound, which was at once covered with collodion linen.

The reduction effected, Bell's splints were applied, and the leg suspended in the apparatus of Ravaton. These and other tenta-



tive means were, however, insufficient to prevent the superior fragment penetrating the skin in which it was fixed, and which it threatened to pass through. To remedy this inconvenience, which was already complicated with considerable inflammation, a point of steel, similar to that of Malgaigne, was employed as follows:—

A case of gutta percha enclosed the posterior half of the limb, the foot, and a part of the thigh; through the four holes at its corners a cord was placed, which suspended the leg to the top of the bed.



A band, proceeding from the two sides of the case, rose in a hoop over the anterior surface of the limb; it was pierced, to allow the screw to pass, which was introduced about two inches above the fracture, and fixed in the tibia, as in the preceding case.

The reduction was complete, inasmuch as the osseous point no longer raised the skin, which it even seemed to have drawn down with it, efforts to raise it being unsuccessful.

August 20th. No change, excepting around the point of depression of the instrument, where the skin had for a small extent preserved its natural colour, and beyond presented an engorged and red appearance.

Resolatives and emollients.

August 25th. Increased tumefaction. The shoulder part of the point of the screw was too much entangled in the skin, which it depressed and strangled, and in the substance of which it was, so to speak, hidden. This accident was doubtless owing to the want of length and too great thickness of the point. The point was necessarily removed, the leg was left in the case, and covered with poultices.

August 28th. A fistulous opening communicated with the fracture. On the small wound made by the point being a little enlarged, the denuded bone was discovered, showing the point at which the instrument had penetrated. Pus was frequently discharged. Cataplasms.

August 30th. Suppuration much less; the fibula consolidated; there only remained slight mobility of the tibia. A splint of wood was applied, and the leg a little bent was laid on its external side.

September 15th. Suppuration increased; stiffness of the knee; it was found desirable to exercise the joint. In order to preserve the recent union, a posterior and two lateral splints of gutta percha were applied, and over the whole a starched bandage.

October 9th. Freedom of movement in great measure restored; the patient began to walk, and on the same day demanded and obtained his discharge.

OBLIQUE FRACTURE OF THE TIBIA.

Lecrinx, Pierre, 43 years of age, entered the hospital, December 15th, 1849. He had fallen down stairs, but being drunk at the time, could give no circumstantial account.

Fracture of the inferior third of the tibia; great projection of the superior fragment, which threatened to penetrate the skin; the fibula was fractured at about the same height.

Abnormal mobility, crepitation; slight swelling when admitted, which, on the following day, had much increased. A few drops of ammonia were administered, which calmed the state of general agitation, which was extreme.

All efforts to produce complete reduction were ineffectual.

The injured limb surrounded with compresses soaked in sedatives, and Desault's dressing very loosely applied, was placed on cushions, representing an inclined plane, the summit answering to the foot. The posterior half of the leg was encased in gutta percha, from the foot to the knee.

To preserve the reduction of the still displaced fragment, the compresses were placed above the broken part, and confined by bands of gutta. To regulate the degree of pressure, the size of the pad placed on the superior fragment was increased or diminished at discretion.

The fracture was cured without contraction, but with slight deformity.

From the moment in which it was ascertained that the callus had formed and the displacement of the fragment impossible, a starched bandage was applied, and continued until the cure was complete.

MEDICAL ARCHÆOLOGY,

By GEORGE JAMES SQUIBB, Esq.

No. VI.

VAN HELMONT.—John Baptist Van Helmont, commonly called Baron Van Helmont, was born at Brussels in 1577, being the youngest son of a nobleman who died in 1580. He received his education at Louvain, where, by his own account, he had finished his course of philosophy at the age of seventeen. But now it will be best to state what he has said of himself.

"Upon seeing none admitted to examinations at Louvain, but in a gown and masked with a hood, as though the garment did promise learning, I began to perceive that the taking degrees in arts was a piece of mere mockery, and wondered at the simplicity of young men in fancying that they had learned anything from their dotting professors. I entered, therefore, into a serious examination of myself, that I might know how much I was a philosopher, and whether I had really acquired truth and knowledge; but found myself altogether destitute, save that I had learned to wrangle artificially. Then came I to perceive that I knew nothing. Natural philosophy seemed to promise something of knowledge, to which, therefore, I joined the study of astronomy. I applied myself, also, to logic and mathematics; but all these things were

of no account with me, because they contained little truth, and only a parade of science, falsely so called. Finding, therefore, that nothing was sound, I refused the title of Master of Arts; unwilling that professors should play the fool with me, in declaring me a master of seven arts, when I was conscious that I knew nothing.

"A wealthy canonry was promised me then, if I would devote myself to divinity; but Saint Bernard affrighted me from it, saying "that I should eat the sins of the people!" I begged, therefore, of the Lord Jesus that he would vouchsafe to call me to that profession in which I might please him most. The Jesuits began at that time to teach philosophy at Louvain, and one of the professors expounded the disquisitions and secrets of magic. These lectures I greedily received; but instead of grain I reaped only stubble and fantastic conceits void of sense. In the mean time I ran through the writings of the stoics, especially those of Seneca and Epictetus. I seemed in moral philosophy to have found the quintessence of truth, and believed that through stoicism I advanced in Christian perfection; but I discovered afterwards in a dream that stoicism was an empty bubble, and that by this study I became self-sufficient and haughty. Lastly, I turned over Mathiolus and Dioscorides, thinking nothing equally necessary for man to know as the wisdom and goodness of God implants. My curiosity being now raised upon this branch of study, I inquired whether there was any book which contained the maxims and rule of physic, for I then supposed that medicine was not altogether a mere gift, but might be taught and delivered by discipline like other arts and sciences; at least, I thought if medicine was a good gift from the Father of Lights, it might have as a human science its authors into whom, as Beasceal and Ahohab, the spirit of the Lord had inspired the knowledge of all diseases and their causes, as well as the properties of things. I inquired, I say, whether no writer had described the qualities and applications of vegetables, from the hyssop even to the cedar of Lebanon. A professor answered me that none of those things were to be looked for either in Galen or Avicenna. I was ready to believe this from the many fruitless searches I had before made in books for truth and knowledge; however, I read the works of Fuchsius and Fernelius, as containing the whole science of medicine in epitome. Is this, said I to myself, the knowledge of healing? Is the whole history of natural properties shut up in elementary qualities? Then I read the works of Galen twice, of Hippocrates once, whose aphorisms I almost got by heart; all Avicenna, as well as the Greeks, both ancient and moderns, to the amount of six hundred authors. I read them seriously through, and took down, as I went along, whatever seemed curious and worthy of attention; when, at length, reading over my common-place book, I was grieved at the pains I had taken, and the years I had spent in throwing together such a mass of stuff. Therefore, I left off all books whatsoever, firmly believing every good and perfect gift to come down from the Father of Lights, more particularly that of medicine.

"I have attentively surveyed foreign nations but found the same sluggishness, in following the steps of their forefathers, and ignorance among them all. I then became persuaded that the art of healing was an imposture, originally derived from the Greeks for the sake of filthy lucre; till afterwards the Holy Scriptures taught me better. I considered that the plague which then raged at Louvain, was a miserable disease in which every one forsook the sick; and, faithless helpers, distrustful of their own, fled more swiftly than the ignorant and homely pretenders to a method of cure. I then resolved to dedicate myself to the service of the infected; and although no medicine was then known to me but trivial ones, yet God preserved me from the enemy. I was not indeed sent for, but went of my own accord, and that not so much to help them, which I despaired of doing, as for the sake of learning. All that saw me seemed refreshed with hope; and I myself persuaded that by the mere free gift of God, I should in time obtain a mastery in the science. After ten years travel and studies, I withdrew in 1609, being then married, to Vilvoord, that I might there proceed diligently in viewing the vegetable, animal, and mineral kingdoms. I also employed myself some years in chemical operations. I searched into the works of Paracelsus, and at first admired the man, but at last was convinced that there was nothing in him but difficulty, obscurity, and error. Thus tired with continual searching, and concluding that the art of medicine was all deceit and uncertainty, I said, 'Good God! how long wilt thou be angry with mortal man, who has not hitherto disclosed one truth in healing to thy schools? How long wilt thou deny truth to a people confessing thee, more needful in these days than in times past? Is the sacrifice of Moloch pleasing to thee, and wilt thou have the lives of the poor widows and fatherless children, consecrated to thyself, under the most miserable

torture of incurable diseases?' Then I fell on my face, and said, 'O Lord, pardon me, if favour towards my neighbour hath carried me beyond bounds. Pardon, O Lord, my indiscretion, for thou art the root of all goodness. Thou hast known my sighs, and that I confess myself to be, to know, to be worth, to be capable of nothing, but that I am poor, naked, empty, and vain. Give, O Lord, give knowledge to thy servant, that he may know thy creatures; himself first, other things besides himself, all things, and more than all things to be ultimately in thee.' After I had thus earnestly prayed, I fell into a dream, in which, in the sight or view of truth, I saw the whole universe, as it were, a chaos or a confused mass, without form, and almost a mere nothing. And from thence I drew the conceiving of one word, which did signify to me this,—'Behold then, and what things thou seest are nothing. Whatever thou dost urge, is less than nothing itself in the sight of the most High. He knoweth all the bounds of things to be done; thou at least may apply thyself to thy own safety!' In this conception there was an inward precept, that I should become a physician; and that some time or other Raphael himself should be given unto me. Forthwith, therefore, and for thirty whole years after, and their nights following in order, I laboured always to my cost, and often in danger of my life, that I might obtain the knowledge of vegetables and minerals; and, also, of their natures and properties. Meanwhile, I employed myself in prayer, in reading, in a close search of things, in sifting my errors, and in writing down my daily experience. At length I found, with Solomon, that I had for the most part hitherto perplexed my spirit in vain; and I said, 'Vain is the knowledge of all things under the sun, vain are the researches of the curious; whom the Lord Jesus shall call unto wisdom, he, and no other shall come, yea, he that hath reached the top shall yet do very little, unless the favour of the Lord shine upon him.' Lo, thus have I waxed ripe of age, being become a man, and now, also, an old man, unprofitable and unacceptable to God, to whom be all honour."

From this account which Helmont gives of himself, it will be seen that he was far gone in fanaticism. Notwithstanding this, he made several important discoveries in chemistry, among which were phosphorus, the spirits of hartshorn, the spirit of sulphur, and the ærial part of the spa waters, to which he gave the name of gas, from the German geist, ghost or spirit. Some of his results were found serviceable in medicine, and this made him attack the Galenical practice which then prevailed, and which consisted wholly of simples. But although he, in a great degree, succeeded in reducing the system of medicine to the principles of chemistry, he substituted an unintelligible dialect in its place, as if he thought it necessary for the ends of truth, to clothe it in an unknown tongue. He died in 1644, and four years afterwards his works appeared in a collected form, printed by the Elsevirs, at Amsterdam. The editor was his son, *Francis Mercurius Van Helmont*, who was as able a chemist and practitioner as his father, but not a whit behind him in mysticism. In 1650 he came to England, and resided a considerable time at Rugby, in Warwickshire, whither he had been invited to cure Lady Conway of a disorder in her head, which Van Helmont rather increased than remedied. Here he became acquainted with the learned Dr. Henry More, and afterwards a correspondence was kept up between them. During the stay of Van Helmont here, he seems to have imbibed some of the enthusiastic flights of the early quakers, and after his return to Germany, he was visited by Barclay, Penn, and other members of that society. He died at Cologne in 1699.

WILLIAM LILLY.—The name of William Lilly is too famous in the history of empiricism to be omitted in this collection. He was born at Disworth, in Leicestershire, in 1602, and had his education under a puritanical teacher at Ashby-de-la-Zouch. According to his own account he was a forward scholar, and an apt disputant. "For the two last years of my being at school" says he, "I was of the highest form of the school, and chiefest of that form, I could then speak Latin as well as English, could make extempore verses upon any theme, all kinds of verses, hexameter, pentameter, or otherwise, so that if any scholars from remote schools came to dispute, I was ringleader to dispute with them; I could cap verses, &c. If any minister came to examine us, I was brought forth against him, nor would I argue with him unless in the Latin tongue, which I found few of them could speak without breaking Priscian's head; which, if once they did, I would complain to my master, *none bene intelligit linguam Latinam, ree prorsus loquitur!* In the derivation of words I found most of them defective, nor, indeed, were any of them good grammarians. All and every of those scholars who were of my form and standing went to Cambridge, and proved excellent divines, only poor I, William Lilly, was not

so happy. Fortune then frowning upon my father's present condition, he not being in any capacity to maintain me at the university."

In 1628, Lilly went on foot to London, where he arrived with seven shillings and sixpence in his pocket. Soon after his arrival he became servant of all work to one Gilbert Wright, whose widow he married, with one thousand pounds fortune. In 1632 he applied to the study of astrology, under the instructions of one Evans, a Welch clergyman, of scandalous character. Being well grounded in the science, by the lessons of this professor, and a notable manuscript on casting nativities, he now thought himself adept enough to set up as a conjuror and teacher of the occult mysteries. At this period he became acquainted with David Ramsey, the clock maker of James I. Ramsey being informed that there was a great treasure buried in the cloisters of Westminster Abbey, obtained leave of the Dean, Dr. Williams, Bishop of Lincoln, and some time Lord Chancellor, to search for it with the mossical or divining rod.* He then applied to Lilly to exercise his skill in the art of RHABDOMANCY; accordingly the master conjuror, with his assistant, Scot, accompanied Ramsey in the dead of the night to the cloisters, when, observing the rods to tremble over one another on the west side, they concluded that the treasure lay under that spot; but on opening the ground and finding only a coffin, they proceeded into the Abbey. Here they were alarmed by a tempest, which rose suddenly to such a height, that they were afraid the building would fall and bury them in the ruins. The rods ceased to move, the candles and torches, all but one were extinguished, and that burned faintly. Scot was amazed, looked pale and knew not what to do, until Lilly in a commanding voice dismissed the demons that had caused all the uproar. It was deemed prudent, however, to retire, when everything became quiet, and thus the experiment ended. Lilly had cunning enough to ascribe the miscarriage, not to any defect in the art which he professed, but to the number of persons who were present at the operation, and by some of whom it was profanely treated with derision. Lilly's failure in this case did not injure his reputation, for he lived in a credulous age, and he knew well how to profit by all circumstances. When the great rebellion broke out, he had the address to keep in with both parties. He was consulted by the unfortunate king, at the same time that he was the pensioned agent of the Parliament. Lilly read public lectures on astrology, for the improvement of students in the science, by whom he was well paid for his instructions. But his principal emolument arose from his almanack, called '*The Merlinus Anglicus*,' which had an extensive sale, and was consulted as an oracle. His predictions, however, brought him now and then into danger. In 1650, he foretold that the Parliament would not continue, but that a new government would ensue; and, again, in his almanac for 1653, he repeated the prophecy, for which he was called to account before a committee. On receiving notice of this beforehand, from his friend Lenthall, the Speaker, Lilly cancelled the offensive passages, time enough to appear boldly with six altered copies, to answer the charge, which he declared was false, for that these were his genuine almanacs and the others spurious. After the restoration, Lilly obtained the royal pardon and retired to his estate at Hersham, in Surrey, where he united the practice of physic with astrology, by virtue of a licence from Dr. Sheldon, Archbishop of Canterbury, which is worth inserting as a curiosity, and evincing the low estimation in which medical practice was then held:—

Copy of Licence granted by the Archbishop of Canterbury to Lilly.

"Gilbertus, providentia divina Cantuariensis Archiepiscopus, totius Angliæ Prima et Metropolitanus, dilecto nobis in Christo Guilielmo Lilly, in Medicinis Professori, salutem, gratiam, et benedictionem. Cum ex fide digna relatione anepimus te in arte sive facultate Medicinæ per non modicum tempus versatim fuisse, multisque de salute et sanitate corporis vere desperatis (Deo Omnipotente adjuvante) subvenisse eosq; sanasse nec non in arte predicta multorum peritorum laudabili testimonis pro experientia, fidelitate, diligentia et industria tuis circuras quas successeris peragendas in hujusmodi. Arte Medicinæ merito commendatum esse, ad practicandum igitur et exercendum dictam Artem Medicinæ in et per totam Provinciam nostrum Cant. (Civitatem Lond. et circuitu septem miliarum, eidem prox adjecten tantummodo exceptis) ex causis prædictis et aliis nos in hoc per te juste moventibus præstito primitus per te Juramento de agnoscendo Regium supremum potestatem in causis ecclesiasticis et temporalibus ac de renunciando, refutando et recusando omni, et omni modo Jurisdictioni, Potestati, Autoritati et superioritati foraneis juxta vim formam et effectum Statui Parlamenti hujus

* A curious account of the divining rod will be found in the recent and amusing work of Herbert Mayo, Esq.

Regni Angliæ in ex parte editi et provisi quantum nobis per statuta hujus Regni Angliæ liceat et non aliter neque alio modo te admittimus et approbamus Tibiq; Licentiam et Facultatem nostras in hac parte, Tenore præsentium quamdiu te benè et laudabiliter gesseris beniquè concedimus et elargimur.

"In cuius rei Testimonium sigillum (quo in hac parte utimur) præsentibus apponi fecimus. Dat. Undecimo Die Mensis Octobris, Anno Domini 1670. Nostræque Translationis Anno Octavo.

"RADULPH SNOWE,
et
EDM. SHERMAN,
S. RICH. LLOYD, Sur. } Registrarii.

"Vicarii in Spiritualibus Generalis per provinciam Cantuariensem."

Lilly died of apoplexy at Hershaw, June 30, 1681, and was buried in the church of *Walton-on-Thames*.

Butler, who has immortalised him in his 'Hudibras,' thus introduces him to the reader:—

"Qnoth Ralph, Not far from hence doth dwell
A cunning man, hight Sidrophel,
That deals in Destiny's dark counsels,
And sage opinions of the Moon sells:
To whom all people, far and near,
On deep importances repair.
When brass and pewter hap to stray,
And linen slinks out of the way;
When geese and pullen are seduced,
And sows of suckling pigs are choused;
When cattle feel indisposition,
And need the opinion of physician;
When murrian — reigns in hogs or sheep,
When yeast and outward means do fail,
And have no power to work on ale;
When butter does refuse to come,
And love proves cross and troublesome,—
To him with questions and with urine,
They for discovery come or curing."

THE SEVENTEENTH CENTURY.

At the beginning of this century flourished the famous empiric, Dr. FRANCIS ANTHONY, he was the son of a goldsmith in London, and was educated at Cambridge, where, in 1574, he took the degree of Master of Arts. About this period he commenced the study of chemistry, and published in 1598, a 'Treatise on the Excellency of a Medicine drawn from Gold.' Two years afterwards he was summoned before the President and Censors of the College of Physicians, for practising without a licence. He confessed that he had done so and had cured above twenty persons of several diseases, to whom he gave purging and vomiting physic, to others a diaphoretic medicine, prepared from gold and mercury, as the case required. Upon this he was examined, and being found inexpert, he was interdicted practice. About a month afterwards he was committed to prison and fined five pounds for practising against the statutes and privilege of the College, but upon his application to the Lord-Chief-Justice, he was set at liberty, which gave such umbrage to the learned body, that the President complained to the Judge, who it seems then withdrew his protection from Anthony, and the interdiction was renewed. Not long after, however, he was again accused, and upon his own confession, was fined five pounds, which, on his refusing to pay, was increased to twenty, and he was then sent to prison. The College proceeded still further, and commenced a prosecution at law, and succeeded. After remaining in prison some time, he was set at liberty, and the penalty remitted. He now took, what he should have done before, his doctor's degree, which, however, did not prevent new complaints being brought against him for giving a nostrum which he called "*aurum potable*," or potable gold, and which he represented as a universal remedy for the cure of diseases. The war was now removed from the courts of law to the press, which laboured with publications for and against Anthony and his discovery. In 1610, the Doctor printed a quarto volume in Latin, with this title, '*Medicina Chymica, et veri potabilis auri assertio ex Lucubrationibus, Fra Anthonii, Londinensis, in Medicina Doctoris*,'—that is, 'A Defence of Chemical Physick in the true potable gold, made by Francis Anthony, of London, Doctor in Physick.' In the preface, the author informs the reader that, after inexpressible labour, watching, and expense, he had, through the blessing of God, attained all he sought for in his inquiries. But now, when he should have reaped the fruits of his labour, he complains that some envious person had sown tares with his wheat, which compelled him to write this discourse, to prove that he was no imposter, and that there was certainty in the science he professed. After citing many authorities to prove the efficacy of gold, Anthony relates the

whole process of his "*aurum potable*," taking care, however, to conceal the method by which the precious metal is dissolved. He then affirms that his medicine is a kind of extract or honey of gold, capable of being dissolved in any menstruum whatever, whence it may be called "*potabile*." That this "*aurum potable*" deserves the name of a universal medicine, he proceeds to prove by describing the manner of its operation, its power of preserving health, of cherishing the natural heat, comforting the bowels, invigorating the blood, promoting secretions and evacuations, after which, he shows how it acts in assisting nature to free the body from diseases; lastly, the doctor enumerates several distempers which this "*aurum potable*" cures, such as frequent dangerous vomitings, all sorts of fluxes, stoppages of urine and diabetes, putrid and epidemic fevers, nay, even the plague itself, as it was demonstrated by its success in the great pestilence in the year 1602.

He also insists on its curing palsies, and assures us that although an anodyne, it has no sleepifying quality. He then adds certificates of cures, one of which is the daughter-in-law of Dr. Lewkner, of Winchester, who had long been in a declining state, and at the time the "*aurum potable*" was exhibited, she was in convulsions, yet in the space of half an hour all the symptoms vanished, and she was able to eat flesh, which she had not before tasted for a month. A letter from Berkhamstead, dated August 13th, 1609, states that "a new disease had lately shown itself in Hertfordshire, which occasioned such pains in the head, stomach, and bones, as threw the patient into a kind of frenzy, but that upon giving a small quantity of the '*aurum potable*,' the symptoms ceased, and if given in sufficient time were prevented." From this letter it appears that the price of the medicine was five shillings an ounce.

Anthony's book did not go unanswered, and the controversy about the potable gold became so warm, that he was obliged to publish another apology in English, which was attacked by Dr. Cotta, of Northampton, in 1623. The same year Anthony died, and was buried in the church of St. Bartholomew the Great, Smithfield, where a handsome monument was erected to his memory, bearing the following inscription:—

"There needs no verse to beautify thy praise,
Or keep in memory thy spotless name,
Religion, virtue, and thy skill did raise
A threefold pillar to thy lasting fame.

Though poisoning envy ever sought to blame,
Or hide the fruits of thy intention;
Yet shall all they commend that high design
Of purest gold to make a medicine,
That feel thy help by that thy rare invention."

Anthony left two sons, John and Charles, both physicians, the former in London, and the latter at Bedford. John sold his father's medicine, and lived by it very handsomely. At length the fame of the "*aurum potable*" died away, and before the end of the century, it ceased to exist as a vended nostrum, the quacks finding it more to their purpose to extract gold from their patients than to give it in any other form.

"There is nothing new under the sun," saith the royal preacher; and of this truth the history of medicine abounds with instances. The "*aurum potable*," although it gained a great name in the former part of the seventeenth century, and was even spoken favourably of by the great Boyle, fell into disuse, and seemed to have been consigned to the region of forgotten chimeras; when, all at once, in 1811, it was revived in France by a regular practitioner, Dr. Christein, of Montpellier. This "*Ancien Medecin de l'Hospital Militaire*" announced the discovery of a new method of curing inveterate diseases, by introducing medicinal substances externally by way of friction. This he calls the "*Methode Iatraleptique*," for a Frenchman, whether in writing or speechifying, must always be allowed to adopt figurative and high-sounding language, even on the simplest subjects.

Among the cases detailed by the doctor, in which he experienced complete success, were diseases of the urinary passages by friction with camphor, of mania with colocynth, and of dropsy with digitalis. But the great wonder of all was the "*Nouveau remède anti-venerien*" of the anti-syphilitic efficacy of gold. After much consideration, and many experiments, Christein prepared an amalgam of gold, and volatised the mercury by the action of heat, and occasionally with nitric acid. The effects produced by this preparation were most extraordinary, not only upon venereal affections, but also upon glandular swellings and disorders of the womb. Laboured reports were published, of the benefits produced by the golden panacea; but in a little while no more was heard of the "*Methode Iatraleptique*."

CORRESPONDENCE.

To the Editor of 'The Institute.'

Sir,—I have read your article of 22nd current, on the Preliminary Education of Medical Practitioners, with an interest proportioned to the importance of the subject. There cannot be the slightest doubt that deficiency in general education, on the part of the members of our profession, in an educated country, compromises both their social position, and their professional usefulness. I am also of your opinion that there is, in this country, a large amount of under-educated medical men, whose literary imperfections (whatever may be their strictly professional attainments), degrade themselves and the profession to which they belong. Nor is it merely to be regretted that they thus lose their prestige, for the fact is, that they are not fitted for such a profession. Regarded as mere machines for pulling teeth, drawing blood, severing limbs, opening abscesses, delivering women, reducing dislocations, and many similar operations, it is quite conceivable that they may be educated to do these things, as women are to do some of them, with a very minute amount of scholarship. But there are other functions of a medical man for which some share of scholarship is certainly required, even in the humblest members of our profession; and this for two important reasons,—1st., we require to get at the thoughts of other men, and 2nd., we require to impart our own thoughts to other men.

1st. As to getting at the thoughts of others, it must be admitted that, so far as this object is contemplated apart from the other, the dead languages have lost a considerable portion of their former value, and the living languages have gained in the same proportion. In saying so, I am far from desiring to undervalue the former, even as mere repositories of valuable matter. The Latin language, in particular, has so long been the vehicle of scientific discovery, that no man can have ready access to the stores of our own or of other sciences, who cannot read it easily. I merely wish by what I have said, to call your attention to the greatly increased relative importance of French, German, and Italian, to Greek and Latin, as means of getting at the information which is valuable to men of our day and generation.

2nd. In relation to the power of imparting our thoughts to others, the value of classical literature is above all price. Language being the instrument of thought, the study of its structure is the study of practical logic. In other words, in learning to speak and write with accuracy, we also learn to think with accuracy. The converse is equally true; those who have not learned to write some language with accuracy, are generally confused thinkers. Now, all scholars are agreed, that a clear notion of the mechanism of language is best acquired by the usual training of the classical school, when applied, as it generally is, and always ought to be, to the study of our own language, and to the art of composition.

The full development of these principles would require a longer letter than I can ask you to publish. But I would ask any medical man who is a reader, whether he is not sensible, in every number of every medical periodical, of the difference between the well-educated, and the under-educated members of our profession. The former you read with ease, intelligence, and pleasure; the latter with difficulty, embarrassment, and misapprehension; and often with listlessness and drowsiness. They cannot bring out their own ideas intelligibly, because the art of doing so has constituted no part of their education. There is no member of our profession, who may not compromise the safety of his patients by inaccurate language in prescribing for them, or writing about them; or who may not, from the same cause, when called to give judicial evidence, sacrifice the life, the character, or the happiness of the innocent, or secure impunity to the criminal; or the serious loss, in all these cases, of his own reputation.

The educated members of the medical profession ought not to be mixed up on equal terms, as they now are, with a large amount of competitors who are discredibly under-educated. But, however much this is to be deprecated, there are serious difficulties in the way of an effectual remedy for the evil. I am inclined to think that, under a really good national system, preliminary education ought not to be tested by Medical Boards and Colleges; but in the preliminary schools, or at least by some separate probation, prior to the commencement of medical study. But as no mode of accomplishing the important object can be carried into effect by the machinery of our present laws, it must be evident to you that the evil is, like many other evils affecting our profession, fairly chargeable on the apathy of our legislators, and on the interested conduct of those Medical Incorporations which have thrown needless impediments in the path of Medical Reform.

We must avoid the opposite errors of requiring too little, and of requiring too much preliminary education, of the candidate for general practice. Great changes cannot be brought about at once, however desirable they may be. The attempt to take too high a ground would end in a failure. There is such a thing as a high examination and a low decision; a great parade of high requirements, with little practical enforcement of them. Examples of this could, perhaps, be pointed out if it were not an invidious task. Whatever is done should be done honestly, unostentatiously, firmly, and gradually. A sudden leap from zero to summer heat, would throw the general practice of this country into the hands of the unqualified. In saying this I am far from arguing for our present do-nothing system. I hold that some little may be done even with our present imperfect mechanism, to elevate the character of our profession for general attainments; and that a very great deal might be done if legislators would do their duty. If I have suggested cautions, it is from my high sense of the value of the object to be attained, and my desire that it should neither be baffled by burning zeal, nor by frigid indifference.

The College of Surgeons here, of which I am a Fellow, has never been behind any other Board conferring General Practitioners' qualifications, (and has often taken the lead of all of them,) in the class of requirements of which I have been writing. In regard to Latin, it has lately taken a step in the right direction, and the same thing has been done by the Glasgow Faculty of Physicians and Surgeons. Instead of Latin being, as heretofore, a necessary part of the professional examination, it is now in the power of the student to take it separately from the rest in the first year, or any other year of his professional study. He is encouraged to do so at an annual period, early in the winter session. The trial is entirely conducted by written translations of passages carefully selected, chiefly from the Latin classics. Rejections are numerous; yet the proceeding is popular among the students, who have it in their power to come back again at the return of the annual period. I have no doubt that we shall thus gradually secure more attention to the Latin language among our students here. But a general remedy, by legislative authority, applicable to us and all other Boards alike, seems as far off as ever. It is in vain that we Scotch are perfectly prepared, and have long been so, to co-operate harmoniously with each other, if England be not also prepared, and if monopoly consequently be not controlled by the legislative authority, which alone is able to bring it into subjection. But selfish monopolists may rest assured, that neither great names, nor pompous pretensions to medical and surgical purity, nor even the real scientific merit which some of them possess, will succeed in blinding the profession to the accumulated evils to which it is subjected by their agency, nor in preventing it from seeking that remedy to which it has so just a claim.

G.
Edinburgh, March 24, 1851.

REVIEW.

Phthisis and the Stethoscope; a concise practical Guide to the Physical Diagnosis of Consumption. By RICHARD PAYNE COTTON, M.D., Member of the Royal College of Physicians, London, and Assistant Physician to the Hospital for Consumption and Diseases of the Chest. London: John Churchill, Princes-street, Soho. 1851. 12mo. p. 97.

This valuable little tract appears to be an offering to the profession, as the *avant-coureur* of a complete and general treatise on Phthisis, which has been crowned with the Fothergillian medal for this year, and which is in course of preparation for the press.

This preliminary work bears throughout evidence of the Author's minute, accurate, and long-continued investigation of the various forms of morbid changes which may take place in the lungs; their progress from one degree of deterioration to another, as indicated by the invaluable agencies of percussion and auscultation by a master-hand, and a thoroughly-practised ear.

On a first reading we had marked several passages, with the view to quotation; but on a second perusal towards their selection, this appeared to be difficult without rendering them too numerous, and in a great measure unnecessary, as every Practitioner and every Student wishing to be informed of the best modern science as respects the pathology of the lungs, will assuredly read the tract itself.

In describing the best modes of percussing and auscultating, the reader is assured, that—

“It is practice alone which can enable us to form a correct opinion of the shades of difference thus presented; but the senses of hearing and touch may be so familiarised to their varieties, as

to render the most minute changes in valuable evidence of disease."

With this observation on the *education* of the ear and of the sense of touch, we recommend the attentive perusal of this small but valuable work of an accomplished Pathologist.

MEETINGS OF SOCIETIES.

MEDICAL SOCIETY,	Saturday,	March 29,	at 8 P.M.
CHEMICAL,	Monday,	do.	31, at 8 P.M.
MEDICAL CHIRURGICAL,	Tuesday,	April 1,	at 8½ P.M.
LINNÆAN,	Tuesday,	do.	1, at 8 P.M.
PATHOLOGICAL,	Tuesday,	do.	1, at 8 P.M.
ROYAL,	Thursday,	do.	3, at 8½ P.M.
ROYAL INSTITUTION,	Friday,	do.	4, at 8½ P.M.
BOTANICAL,	Friday,	do.	4, at 8 P.M.
MEDICAL SOCIETY,	Saturday,	do.	5, at 8 P.M.

THE INSTITUTE MEDICAL JOURNAL.

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THE INSTITUTE.

LONDON, SATURDAY, MARCH 29, 1851.

THE SUBSCRIBERS OF THE 'INSTITUTE'

ARE respectfully informed, that the number of the Journal now published, completing the second volume, is the last that will be issued *for the present*, and it is with sentiments of regret that the Proprietors and Conductors offer this announcement to their readers.

The PRINCIPLES which animated the originators of this publication were stated in the Prospectus; the assertion and vindication of those principles, would, it was hoped, have experienced from gentlemen engaged in General Practice, more cordial and extensive support. Of the interests of this class by far the most numerous of the profession, 'THE INSTITUTE' offered itself as the humble advocate, but efforts and exertions made through the Press, for promoting the general improvement of the Profession, cannot be sustained and rendered efficient without the hearty and active support of the General Practitioners at large.

The improbability of the polity of the Profession engaging the attention of the Legislature during the present pre-occupied and turbulent Session of Parliament, and this Journal not having met with the encouragement anticipated, it is thought right to suspend its publication.

The Conductors feel satisfied, that the plan of the Journal as stated in the Prospectus, was admirably calculated to render it, even in a scientific point of view, one of the best Journals ever published.

While the Conductors, deeply interested in the welfare of the Profession, regret that their effort has met with no

better success, they have nothing to regret or retract as respects their motives or objects.

The present announcement is to be considered as amounting simply to the fact, that *for the present* the Journal is suspended. Its publication may at any time be resumed, and whenever that desirable event occurs, it will afford the greatest satisfaction to the Conductors to re-commence their labours. Its revival, however, can only be effected by the Profession generally coming forward to its support.

To carry on the Journal without loss, 1,200 subscribers are required. Should a subscription list to this amount be obtained, its publication under the most favourable auspices will be immediately re-commenced.

If this be the wish of gentlemen in General Practice, a notification to that effect should be sent without delay to the office of the Journal.

Be it moreover, understood, that the Journal was never intended to be what is termed a commercial speculation, pecuniary profit not being contemplated. Had it produced more than sufficient to defray the necessary expenses, the surplus would have been devoted to the improvement of the Journal, and the more liberal remuneration of its Contributors.

The Conductors desire to conclude with expressing their best thanks to those gentlemen who have favoured them with communications for the pages of the Journal, and who have given their support to the undertaking.

THE SYSTEM OF APPRENTICESHIP.

It has been a very common practice to attribute many of the evils under which our Profession labours, to the system of Apprenticeship. It has been considered as a degrading species of servitude, which confers great advantages upon the master, and none at all upon the pupil, and which, for the benefit of the former, sacrifices the best period of the life of the latter. That many of these assertions were once applicable, it is impossible to deny, and we have learned that it was a common practice for a young man to spend seven years in an Apothecary's shop in the toilsome and unprofitable duty of compounding drugs. But they who argue against the present system, by continually referring to the abuses of the past, are guilty of as much absurdity as if they were to argue against the present systems pursued in the army, the navy, the church, or the law, because, in the last century, all these services and professions sanctioned customs and abuses which the present age is gradually sweeping away.

Some hundred years ago the Apothecary was very little better than a tradesman; he kept an open shop, and commonly sold those articles which are now procured at the druggist's; in fact he occupied almost exactly the same position in society as the Chemist and Druggist of the present day. We say *almost*, because however ignorant and uneducated the greater portion of the Apothecaries then were, it nevertheless appears that they possessed the *right* to practice medicine, which privilege the present Chemists and Druggists do not possess. The Apothecary of that day was, therefore, very truly a kind of hybrid, an "amphibious animal," as he

has been called, combining the profits of a trade with the emoluments and honours of a profession. Some of the more ambitious Apothecaries, desirous of acquiring a dash of scientific distinction, occasionally attended the lectures of some surgeon, and saw the practice of an hospital; and a few were bold enough to present themselves for examination at Surgeons' Hall, where, after going through the farce of holding a few minutes' conversation with the Examiners, a diploma was presented to them on the consideration of their paying some thirty guineas. Thus prepared for the duties of medical practice, the Surgeon-Apothecary of that day proceeded to drive an excellent trade from his "amphibious" occupation; pills and black-draughts, leeches and Spanish liquorice, and perhaps in addition, soap and perfumery, were sold behind the counter; and if any unhappy victim became too ill to attend at the shop, or if his case assumed anything of a serious aspect, the Apothecary then commenced a system of unmerciful drugging; six and eight draughts a day, and perhaps as many pills, with a proportionate quantity of lotions and embrocations were duly delivered to the patient, and either conscientiously consumed, or ruthlessly thrown out of the window; and as Christmas after Christmas successively came round, good long bills were regularly sent in and as regularly paid, and a gratuity was usually added by the grateful patient in consideration of the zeal, assiduity, and attention of the medical attendant.

While this thriving business was going on, it was only natural that many men, who were well to do in the world should desire their sons to be brought up to so profitable an occupation, and hence we find that boys were taken away from school and apprenticed, with handsome premiums, to Surgeon-Apothecaries; and after spending seven years in "culling of simples," in rolling up pills, spreading plaisters, preparing mixtures, draughts, and lotions, they were completely prepared for following in the steps of their predecessors and instructors, unless their ambition led them to go through the above-mentioned farce of being examined at Surgeons' Hall previously to their commencing practice.

The Act of 1815 effected a marvellous change in the constitution of the Medical Profession, and instead of education being optional it was made compulsory. Hence it happened, that without any enactment being passed to separate the sale of drugs from the practice of physic, yet this result actually took place to a very great extent; and the Chemists and Druggists, who as a body, were comparatively few before 1815, became very numerous after that date, and assumed that portion of the Apothecary's business, which the latter, by his superior education, and his consequent elevation in society, had been induced to relinquish. It is quite true that some members of our Profession, do still combine the business of a Druggist with that of a Medical Practitioner, and although we do not approve the combination, we feel that there are many reasons, drawn from expediency, which may be adduced against any legislative measures being adopted towards their forcible separation.

With regard to the clause relating to apprenticeships, it may not perhaps be generally known, that the promoters of the Bill passed in 1815, did not propose or desire that clause at all; but it was inserted during the progress of the Bill through the House of Lords, and acceded to, though not recommended by, the associated Practitioners of that period. The duration of the apprenticeship was limited to five years,

but it was made compulsory, and could only be served with one who was an Apothecary, or was legally entitled to practice as such.

We shall now proceed to inquire what are the merits and demerits of the system of Medical Apprenticeships, as at present conducted, freely exposing its defects, but at the same time showing the absurdity of the exaggerated statements which have been made by its opponents. We may remark that under any new arrangement of medical affairs, the apprenticeship system would probably be very much modified.

In the first place, we may remark, that at the time of the passing of the Act of 1815, there were hardly any other means for the student to acquire information, except from his master, for Medical Schools in London could scarcely be said to exist, although, as we have before remarked, lectures were delivered, chiefly on Anatomy and Surgery, at one or two of the large hospitals. However ignorant, therefore, the Surgeon-Apothecaries of that day really were, they were almost the only persons, except the Physicians, who possessed any medical knowledge at all; and it was surely not unreasonable that a boy should be placed with one who practised the very branch of the Profession which the pupil was afterwards to follow. The first examinations which were held at Apothecaries' Hall were of a very elementary character, comprising only a slight knowledge of Chemistry and Materia Medica, and the translation of Physicians' prescriptions, and this knowledge might certainly be gained by a boy of ordinary application, placed for five years with an Apothecary. But in process of time, the Medical Schools became regularly organized, and lectures were given upon all the branches of Medical Theory and Practice; in still later times, the Collegiate system has been adopted with a considerable amount of success, at some of our large hospitals. Under these circumstances, the necessity for an apprenticeship is much less urgent than formerly, and we are very willing to allow, that a regular course of Collegiate education, with instructions from various Professors in the different branches of our art, is far better than any apprenticeship.

It is only fair to admit that the Society of Apothecaries, finding themselves trammelled with a clause demanding a compulsory apprenticeship from those who applied for their licence, have done everything in their power to secure the utility of the system, and at the same time to remove or modify, as far as possible, its objectionable features. Although the Act of Parliament demands an apprenticeship of five years, it is now perfectly well known, that those five years may, and do comprise the whole period of a student's career, so that, devoting three years to hospital duties and attendance on lectures, the pupil need spend only two in the actual service of his master.

Now, we are not prepared to admit that these two years are necessarily mis-spent. As we remarked at the commencement of this article, the old Apothecary, the compounder of multitudinous draughts, lotions, and boluses, is gradually, but very certainly, giving place to the educated Practitioner, who is well acquainted with the nature and symptoms of disease, and with the best methods of treating it. We are by no means sure that it is in any way injurious to a boy of sixteen to spend a year or two with such a man; for even under the most unfavourable circumstances, the pupil acquires a general acquaintance with the materials of his art, and a

facility in applying them to their proper uses; and although the *pure* Physician and the *pure* Surgeon may sneer at the idea of a person condescending to practice the manipulations of our Profession, we nevertheless think that they are essential to be understood by every Practitioner of Medicine. It may not, indeed, be eventually necessary, owing to the division of labour in our great cities, that every man should personally prepare his own remedies; but it is evident that in many circumstances he *must* do so, as at sea, in the middle of the night, or in remote country districts. We therefore, maintain that every Practitioner of the healing art—whether Physician, Surgeon, or General Practitioner—ought to be well and practically acquainted with the manipulations employed in the preparation of medicines; and although circumstances may render it unnecessary for him to pursue this department of our art, yet the knowledge so acquired will be of infinite use to him in his subsequent ministrations at the bedside of the sick.

But we have now taken only the lowest view of the case, and have shown that two years spent in pharmacy are not wholly wasted; but the fact is, that, in most cases, the pupil does *not* spend his time merely in learning pharmacy; and we assert that it is a gross libel on the General Practitioners of this country to maintain the contrary. The pupil is received into the house of the Practitioner, and is treated like one of the family; he learns regularity of conduct and gentlemanly behaviour; if his instructor dispenses medicines, he of course assists in this very essential part of medical practice; he also sees many of those cases of disease which fall to the care of the greater bulk of our Profession, the diseases of childhood, and the accidents which are continually occurring and requiring medical aid. If his principal be the Surgeon of an Union, a wide field of observation is open for the exercise of his industry, and the practical knowledge which he there obtains is of infinite service to him in his future career.

We must admit, however, that, in some cases, the Apprenticeship clause acts with great severity and with great injustice; we mean in those cases where the pupil has received a good and sound education, and his examination cannot be granted to him because he has not gone through the formality of an actual servitude to an Apothecary. This case is undoubtedly a most oppressive one, and we heartily desire that, until the Act of Parliament be repealed, some discretionary power could be given to dispense with the proof of an actual apprenticeship, in those cases where the candidate is, in other respects, qualified to practice his Profession; and we cannot wonder at the murmurs which the present apparently harsh and arbitrary course repeatedly calls forth.

With this exception, however, we do not conceive that a system of pupilage for one or two years is in any way injurious; on the contrary, it seems to us to be highly beneficial; and although, under a new arrangement of medical affairs, we have no desire to see the Apprenticeship system retained, we should, nevertheless, strongly urge the necessity of every pupil going through a course of Collegiate discipline, or domestic pupilage, previously to, or concurrently with, his hospital studies. Against that pseudo-liberality which would leave the youth, destined for our Profession, to the exercise of their own judgment, to learn what they please, and where they please, and how they please, we entirely set our faces;

and shall continue to oppose such a ridiculous and Utopian theory, until we are convinced that Medical Students are unlike young men in every other walk of life, and are endowed, above their fellows, with an intuitive love of regularity and order, and with an innate power of discriminating right from wrong.

MEDICAL BENEVOLENT AND PROVIDENT SOCIETIES.

WE have, on many occasions, had to animadvert in very strong terms on the apathy and indifference with which the efforts of those benevolent individuals are received, who are devoting their time, talents, and contributions to the formation and support of Institutions calculated to confer inestimable benefits on the sick, aged, or unfortunate members of the Medical Profession, their widows, orphans, and others who might be dependent upon them.

The Medical Profession as a whole has much to answer for in this particular, and it is not to be wondered at that its social condition is so truly unsatisfactory, when its members seem incapable of making any simultaneous effort to effect an amelioration of the evils so loudly complained of. Can anything more strikingly illustrate the truth of what we have just asserted—that the Medical Profession, from some inexplicable cause or other is so apathetic, selfish, and indolent beyond every other profession, as to appear incapable of originating or sustaining any Institution of a benevolent character for its unfortunate members—as the list of the members of the Society for the Relief of the Widows and Orphans of Medical men, and the non-existence of any College for the reception of distressed members of the Medical Profession or their widows, or of any Public School for the education and maintenance of their orphan children supplies. We have no scruples in declaring that these sad shortcomings are lamentably degrading to the Medical Profession, and if permitted to exist for a much longer period, will very properly deprive Medical men of a large portion of the public sympathy. We have never considered that the public has been unmindful of the great debt of gratitude it owes to the Medical Profession—or that society has ever evinced a disposition to evade any fair claims on its sympathy or consideration—we have felt that the public has never been properly appealed to in the matter, and we charge the Profession with a gross neglect of a great public duty for having so long failed to initiate any feasible scheme for remedying evils of such glaring magnitude.

We are happy, however, to perceive that two Societies have recently arisen, each labouring hard to remove this monstrous opprobrium. We allude to the "British Medical Fund," and the admirable institution of which the benevolent and energetic Mr. PROPERT is the originator and liberal benefactor—"The Royal Medical Benevolent College." We have neither time nor space to inter into the particulars of these most praiseworthy undertakings, the particulars of which may easily be obtained on application, but we do earnestly commend them both to the consideration and liberal support of all classes of medical men.

LIST OF THE MEMBERS OF THE GREAT NATIONAL ASSOCIATION.

*(Extracted from the 'Paper of Transactions,' dated July, 1845.)**Continued from page 243.*

- Paxon, G. K., Cranfield, Beds
 Payne, E. M., Verryan, Cornwall
 Payne, G. S., Andover, Hants
 Payne, G. S., Andover
 Paynter, J. W., Pembroke
 Pearce, W. A., Halifax Infirmary, Yorkshire
 Pearce, Samuel, 135, Bethnal green road
 Pearce, W. W., Measham, Warwick
 Pearce, T., Holesworth, Devon
 Pearce, F., St. Austell, Cornwall
 Pearce, F. D., Kingsbridge, Devon
 Pearl, Geoffrey, Windsor
 Pearce, E., Collington, Hereford
 Pearce, F. B., Dunster, Somerset
 Pearce, D. W., 20, Colet place, Commercial road, east
 Pearce, G., 46, Marsham street, Westminster
 Pearson, G., 14, Beaumont street, Portland place
 Peck, F. M., Folkestone, Kent
 Peck, R. J., Newmarket, Suffolk
 Peck, W., Kimbolton, Hunts
 Peck, W. R., Kimbolton, Hunts
 Pedgrift, R., Loddon, Norfolk
 Peede, A., Dartford
 Pemmell, P., Canterbury
 Pennington, R. R., 15, Portman square
 Penrose, C., Little Brickhill, Bucks
 Peppercorn, F., 3, Delahay-street, Westminster
 Percival, W., sen., Northampton
 Percival, W., jun., Northampton
 Percy, E. F., Liverpool
 Peregrine, J. P. P., 3, Half Moon-street
 Peregrine, Thos., 17, Mount-st., Grosvenor-square
 Perfect, G. A., Town Malling, Kent
 Perinton, J. T., Bristol
 Perkins, H., 25, Mortimer-street, Cavendish-square
 Perkins, T. H., 2, North-side, Bethnal Green
 Perkins, S. S., Exeter
 Perkins, J., Exeter
 Perks, W., Hitchin, Herts
 Perks, E. R., Portsea, Hants
 Perrin, J. W., St. John's-st., Oxford
 Perrin, W. J., Stafford
 Perrin, J. D., Temple Cloud
 Perry, G. J., Reynoldstone, Glamorgan
 Perry, J., 4, Eaton-square
 Perry, R., Marden, Kent
 Perry, J., Godalming
 Perry, R., Marden, Waterford, Herts
 Perry, R. R., Hampstead
 Pettigrew, William Henry, 200, Tooley-st.
 Pettman, H., Sandwich, Kent
 Phene, H., Ryde, Isle of Wight
 Phillips, E. B., Hales Owen, Worcestershire
 Phillips, J., Bethnal House, Bethnal Green
 Phillips, R., Angel-place, Islington
 Phillips, T. G., 44, Albion-st., Hyde Park
 Phillott, A., 4, Wimpole-street
 Phillott, J. S., Mortlake
 Philson, W. (M.D.), Hitchin, Herts
 Phipps, J. G., 3, Fir Grove-place, North Brixton
 Pick, J. P., Braunton, near Barnstaple
 Pickance, J., Penshurst, Kent
 Piddock, A. R., Woodbury, near Exeter
 Pidwell, T., jun., Penzance, Cornwall
 Piercey, M., Portsmouth
 Pilgrim, E. W., Knutsford, Cheshire
 Pinching, C. J., Cheltenham
 Pinching, R. L., Walthamstow, Essex
 Pincott, R., Chipping Ongar, Essex
 Pink, H. N., Greenwich
 Pink, G., East Meon, Hants
 Pink, H., Blackdown, Dorset
 Pinkwel, R., Southampton
 Piper, S. E., Darlington
 Piskett, G., Bognor Lassen
 Pitt, T. B., Mattishall, Norfolk
 Pittock, F. W., Sellingle
 Player, W., Bristol, Surgeon to the Colston's Hospital School
 Plowman, T., North Curry, Somerset
 Pocock, W., 2, Charterhouse-square
 Pointon, James, Nelson-street, Liverpool
 Poingdestre, C., St. Hillier's, Jersey
 Pollard, C. F., 25, Brompton Crescent
 Pollard, T., Breamham, near Tadcaster, York
 Pollard, E. W., 1, Brompton-square
 Pollock, R. J., 7, Bath-place, Kensington
 Pollock, T., 26, Hatton Garden
 Pomfret, H. L., Allingworth, Cheshire, Surgeon for the Cotton Mills, Glosopdale District, Cheshire
 Ponder, W., 54, Red Cross-street, City
 Ponton, W. E., 22, Ludgate Hill
 Poole, T., Hantshill, Bridgewater
 Poole, J. E., Bridgewater
 Pooley, C., Cirencester
 Pope, J. E., Tring, Herts
 Pope, T.
 Pope, P. M., Town Malling, Kent
 Pope, W. H., Wolverhampton, House Surgeon to the Dispensary and Casualty Hospital
 Pope, W. H., Cleobury Mortimer
 Porter, T., 145, Bishopsgate-st. Without
 Porter, T., 32, Euston-square
 Porter, J. (M.D.), Portsea
 Porter, W. G., Peterborough, Northampton
 Porter, J. G., Peterborough, Northampton
 Postage, J., Helmsby, York
 Postle, J., East Harding, Norfolk
 Potheary, Charles Munslow, Ludlow, Shropshire
 Potter, T., Dale-street, Liverpool
 Potter, S., Broadstairs
 Potter, G. J., Attleborough, Norfolk
 Potter, F. D., Ongar, Essex
 Potter, J. R., Notting Hill
 Pottle, J. R., 20, Bath-street, City-road
 Potts, W., 53, South Audley-street
 Potts, J., Sunderland, Durham
 Pout, H., Yalding, Kent
 Powell, R. H., Tunbridge Wells
 Powell, G., Lechdale, Gloucestershire
 Powell, J. G., Bristol
 Powell, R. H., Bristol
 Powell, H., 36, Pinsbury-square
 Powell, D., 21, Garnault-place, Myddelton-square
 Powell, J. C., 47, Chiswell-street
 Power, J. J., Maidstone
 Power, W. H., 1, Tillotson-place, Waterloo-road
 Pownall, J., Athinsham, Cheshire
 Prance, J. C., Maidstone, Kent
 Prancekord, J., Langport, Somerset
 Pratt, H., Brook Green
 Preshaw, W., St. Hilliers, Jersey
 Preston, W., 28, Upper Berkeley-street
 Preston, Richard, Stand, Manchester
 Preston, N., Rothwell
 Pretty, W., Maude Cottage, Mornington-road
 Price, W., 28, Albert-square, Commercial-road East
 Price, A. F., Slade's-place, Deptford
 Price, J., Hereford
 Price, D., Margate
 Price, H. S., Charminster
 Price, Rees, Tyne Hall, Ilford
 Price, R. C., Lymstone, Devon
 Prichard, A., Bristol, Lecturer on Anatomy at the Medical School
 Prichard, W., Laleston, Bridgend, Glamorgan
 Prichard, H. L., Tir Cadock, Tabach
 Priest, F., Burnham, Norfolk
 Priest, W., Colsterworth
 Prince, R. K., Canterbury
 Prince, F., Swafton, Cambridge
 Prince, J., Balsham Combe, Cambridge
 Pring, J. W., Bangor, North Shields
 Pritchard, T., Hereford
 Pritchard, T., Great Yarmouth, Norfolk
 Pritchard, J., Stratford-upon-Avon, Warwick
 Pritchard, F., Stratford-upon-Avon, Warwick
 Pritchett, C., 6, Limekiln-hill, Limehouse
 Probart, T., Telford, near Horncastle
 Probert, J., Merthyr Tydfil, Glamorgan
 Procter, W., Ironbridge, Salop
 Proctor, H., Hay, Brecknockshire
 Probert, J., 6, New Cavendish-st., Portland-place
 Protheroe, G., Narbeth, South Wales
 Prowse, T., Bristol
 Prowse, J., Bristol
 Prowse, J. B., Bristol
 Pryce, W. F., Birmingham
 Puckett, A. S., Weymouth
 Puddicombe, I. M., Dartmouth
 Puddicombe, J., Dartmouth
 Pullans, R., Epworth, Bawtry, York
 Pulleyne, W. M., Holt, Norfolk
 Pullin, E. B., Sidmouth, Devon
 Pulling, F. L., 21, Old Fish street, City
 Purday, W., Hammersmith
 Pursell, J., Winchester
 Pursey, W., King's road
 Pybas, C. R., Scorton, Yorkshire
 Pycroft, G., Bath
 Pye, Edward, Millhouse, Runcorn, Cheshire
 Pyle, C., Amesbury, Wilts
 Pyle, T. H., Earsdon, Newcastle-on-Tyne
 Pyman, T. C., Witham, Essex
 Pyne, W. C., Wellington, Somerset
 Pync, W. C., Jun., Wellington, Somerset
 Qualtrough, Alexander, Castle Town, Isle of Man
 Queckett, E. J., 50, Wellslose square
 Quellen, John, Ramsay, Isle of Man
 Quesnel, C., St. Hellier's, Jersey
 Quick, J. F., Tiverton
 Quinton, W., Wolverhampton
 Radcliffe, W. H., Liverpool, House Surgeon to the Fever Hospital, and Demonstrator of Anatomy, Royal School of Medicine
 Radford, T., Manchester, Consulting Physician to the Manchester and Salford Lying-in Hospital

- Radford, C., Uckfield, Sussex
 Radford, T., 10, Howley Villas, Harrow road
 Radnor, W., 135, Albany road, Camberwell
 Raine, G. W., Billericay, Essex
 Ralfs, W., Old Brentford
 Ramsbottom, J. M., 15, Amwell street, Claremont square
 Randall, A. M., 43, Finsbury square
 Randall, S., Orford, Woodbridge, Suffolk
 Randall, John M., Farnham, Surrey
 Randolph, J., 55, Marsham street, Westminster
 Randolph, H. W., Milverton, Somerset
 Ranson, R., Cambridge
 Ransom, T. W., Darleston, Wednesbury, Stafford
 Rathbone, John, 1, Webb's County terrace, New Kent road
 Ravis, Josiah, Norwood, Surrey
 Rawbone, G., 17, Manor place, King's road, Chelsea
 Rawle, F., Saffron Walden, Essex
 Rawson, T. E., Kegworth, Leicester
 Ray, C., 7, Elizabeth street, Eaton square
 Ray, C., 82, Gracechurch street
 Ray, G., Milton, Kent
 Ray, J., Bramley, Surrey
 Rayner, T. I., Birstal, near Leeds
 Rayner, W., Uxbridge
 Rayner, T. O., 6, St. Matthew's place, Hackney road
 Rayner, J., 1, Cambridge place, Hackney road
 Raynes, H., Pottton, Bedfordshire
 Raynes, H., Gringley, Bawtry, Yorkshire
 Raynett, J. H., Leatherhead, Surrey
 Read, Thomas, Michal, Isle of Man
 Read, S., 41, Jewin street
 Read, R., 41, Jewin street
 Read, T. P., 18, Hornorton street, Kensington
 Ready, M., Mount Pleasant, Liverpool
 Reckett, W., Boston
 Recks, Robert, Piddleton, Dorset
 Redwood, L., Rhymney Iron Works, Monmouth
 Redford, G., 32, Golden square
 Redman, M., Lincoln
 Ree, H. P., 11, Union place, City road
 Reece, G., 45, Sussex gardens, Hyde park
 Reed, W. H., Tiverton, Devon
 Reed, A., Kingsbridge House, Canterbury
 Rendell, C., Westbury-on-Trim
 Rendell, R., Somersham, St. Ives, Huntingdon
 Rendle, W., 81, Blackman street, Borough
 Rendall, R. M., Maiden Newton, Dorset
 Rest, H. W., Thetford, Norfolk
 Reeves, J.
 Reeves, G.
 Reynolds, H., 42, Moorgate street
 Reynolds, J. H., Leatherhead, Surrey
 Reynolds, H. W., Thame, Oxon
 Rhodes, W., Dewsbury
 Rice, D., Stratford-upon-Avon
 Richards, T. A., Terrace, Camberwell
 Richards, J., St. Hillier's, Jersey
 Richards, H., Old Brentford
 Richards, H., Alfreton, Derby
 Richardson, W., 19, Oxford terrace, Edge-ware road
 Richardson, T. C., 11, Henry street, Old street, St. Luke's
 Richardson, F., Cheltenham
 Richardson, W. T., Highgate
 Richardson, W., Stockton, Durham
 Richmond, G. T., Manchester
 Ricketts, J. A., Litchfield, Hants
 Ridge, Benjamin, Putney
 Ridley, G. R., Stretton-upon-Dunsmore, Warwick
 Ridout, Charles Vie, Egham
 Ridsdale, G., 1, Gower place
 Rigden, G., Canterbury
 Riggall, E., Hull
 Riley, J., Hathersage, Derby
 Ringrose, J., Potter's Bar, Middlesex
 Ripley, J., Whitby, Yorkshire, Medical Officer to the West Whitby District of Whitby Union, and Surgeon to the Dispensary
 Ripley, Richard, Whitby, Yorkshire
 Rising, T. S., Royal Hospital, Great Yarmouth
 Ritchie, R., Faulkner street, Liverpool
 Rix, S. S., Tunbridge Wells
 Rix, W. B., Matching, near Epping, Essex
 Rix, W.
 Robarts, H. P., 11, Great Coram street
 Robarts, B., Manchester
 Robarts, W., Burnham, Bucks
 Robathan, E., Risca, Newport, Monmouth
 Robbs, William, Grantham, Lincoln
 Roberts, L., Modbury, Devon
 Roberts, Edward, Sydenham, Kent
 Roberts, —, Sen., Slaithwaite, Yorkshire
 Roberts, J., Golear
 Roberts, J., Wickwar, Gloucester
 Roberts, Edward, Sydenham
 Roberts, O., St. Asaph, Flintshire
 Roberts, T. W., Bradford, Yorkshire
 Roberts, J., 34, Finsbury Circus
 Roberts, J. H., Norfolk Villa, Finchley road, Surgeon to the Western General Dispensary
 Roberts, Alfred, 34, Finsbury Circus
 Robertson, R. H., 36, Albemarle street
 Robertson, T. S., 36, Assembly road, Mile End
 Robertson, H. A. P., Bristol
 Robertson, A. C., Arequipa, Peru
 Robertson, J., Upwell
 Robertson, A., Chatham
 Robertson, J. B., Marton, Warwick
 Robins, G., 31, Bedford street, Covent garden
 Robinson, R. R., Peckham
 Robinson, W. B., 5, Shacklewell lane
 Robinson, H. C., 2, Caledonian place, Caledonian road
 Robinson, C., Bedford
 Robinson, F. J., Bodmin, Cornwall
 Robinson, C., Edgeware
 Robinson, F. J., St. Austell, Cornwall
 Robinson, D. R., St. Austell, Cornwall
 Robinson, J. C., Syston, Leicester
 Robinson, A. H., Fintona, Omagh, Ireland
 Robinson, F. W.
 Robinson, S. R., Dursley, Gloucester
 Robinson, J. N., Bradford, Yorkshire, Surgeon to the Infirmary
 Robinson, G. R., Henley-on-Thames
 Robinson, W., sen., Huddersfield
 Robinson, James, Bradford, Yorkshire
 Robinson, Charles, Runcorn, Cheshire
 Robinson, T., Alton, Stafford
 Robinson, G., jun., Huddersfield
 Robinson, C., Horbury
 Robson, J., South Shields
 Robson, John, Warrington
 Roche, J., Crown street, Liverpool
 Rock, D., Mill hill, Hendon
 Rockett, Hugh, Clifton
 Roden, T. C., Kidderminster
 Rodgers, S. E. D., 2, Ebury street, Pinlicko
 Rodick, S. Halstead, Essex
 Rodwell, G., Massingham
 Roe, R., Eccles, near Manchester
 Rogers, J., 79, Wardour street, Soho
 Rogers, Joseph, 53, Wardour street
 Rogers, E., Saffron Walden, Essex
 Rogers, N., Grantham
 Rogers, G., Bristol, Surgeon to St. Peter's Hospital
 Rogers, T., West Meon, Hants
 Rogers, G. O., Newport Pagnell, Bucks
 Rogers, John, Droxford, Hants
 Rogers, G., West Meon, Hants
 Rogerson, G., Oxford street, Liverpool
 Rogerson, C., Blackburn, Lancashire
 Rolph, Thomas, Portsmouth
 Rootes, G., Ross, Hereford
 Rootes, W., Symonds, Ross, Hereford
 Roper, A. J., Croydon, (Thornton heath)
 Rose, W., Wycombe, Bucks
 Rose, C., 10, Barnes place, Mile End road
 Rose, J., 1, Trinidad place, Liverpool road
 Rose, J. F., 60, Stamford street
 Roskell, J. W., St. Anne street, Liverpool
 Ross, G., Kennington
 Ross, D., 56, High street, Shadwell
 Ross, W. M., Botley, Hants.
 Rosse, James, Amlwick, Isle of Anglesey
 Roughton, W., Kettering, Northampton
 Rouse, R., Waltham green
 Rouse, F., Penzance, Cornwall
 Routh, G. H. F., 19, Dorset square
 Rowand, C., St. Hillier's, Jersey
 Rowbottom, J., Ardwick
 Rowdan, H. M., 24, Bayham terrace, Camden town, Lecturer on Anatomy at Middlesex Hospital
 Rowe, C. R., Wimborne
 Rowe, George., Haverfordwest, Pembroke
 Rowland, G., Bingham, Grantham
 Rowland, W., Wrexham, Denbigh
 Rowland, J. W., Ironbridge, Salop
 Rowland, R., Llangeitho, Lampeter
 Rowley, F. B., Manchester
 Rowley, E. B., Manchester
 Royston, J., Riptry, Derbyshire
 Rowbottom, J., Brighouse, Halifax, Yorkshire
 Rowland, J., Ironbridge, Salop
 Ruddock, R. B., Bristol
 Rudge, H., Leominster, Hereford
 Rudge, L., Great Barford, Beds
 Rugg, R., Brighton
 Rump, H., Wells, Norfolk
 Rump, R., Wells, Norfolk
 Rumsey, J. C., Leatherhead, Surrey
 Russell, Samuel, Blyth, Nottingham
 Russell, G. J., Gravesend
 Russell, F. M., Cardiff
 Russell, J., Eccles, Manchester
 Russell, J., Hammersmith
 Russell, W. C., Bawtry, Yorkshire
 Russell, Richard Thomas, Horsleydown
 Russell, J., St. Alban's terrace, Kennington
 Russell, J., 24, Goulden terrace, Islington
 Rutherford, S., 132, Ratcliffe highway
 Ryan, E. I., Farningham, Kent
 Ryan, J., 14, Liverpool street, Bishopsgate
 Ryder, H., Weyhill, Andover
 Rye, A. B., Banbury, Oxon
 Ryon, W., 15, Shaftesbury terrace, Pinlicko
 Sadler, J., Misterton, near Brigg
 Sadler, Michael Thomas, Barnsley, York
 Sadler, Samuel C., Purton, Swindon, Wilts
 Sagar, I. F., Leeds
 Salisbury, J. C., 25, City terrace, City rd.
 Salt, T., Rugeley
 Salt, J., Acton
 Salter, Thomas, Poole, Dorset
 Sampson, J. R., Southampton
 Samson, A. S., Weymouth
 Sams, C., Hewitt, Blackheath
 Samuel, H., 39, Mansell street, Goodman's fields
 Sandell, H. W., Pottton, Bedfordshire
 Sandeman, R. W., Hounslow
 Sanders, W., Gravesend
 Sanders, W. Jun., Gravesend

- Sanders, J. G., Gravesend
 Sanders, G., Maidstone, Kent
 Sanderson, R. W.
 Sankey, W., Leeds, near Maidstone
 Sankey, F. H., Wingham, Kent
 Sargant, J., Reigate, Surrey
 Sargant, W., Bletchingley, Surrey
 Saunders, R. V., Bruton, Somerset
 Savage, H., 31, Dorset place, Dorset square
 Saville, R., Sunderland
 Savory, J. T., Wendover, Bucks
 Sawyer, J. J., 101, Park street
 Sax, W., Ormskirk
 Saxton, W. W., Market Drayton, Salop
 Scale, G. J., Landport, Portsea
 Scale, G. R., jun., Landport, Portsea
 Scanlan, E., Park place villa, Maida hill
 Scatliffe, J. Parr, 48, Sloane sq., Chelsea
 Scathard, T., Boston, York
 Scarbrough, J. L., Shaldon, Devon
 Scard, H., Kew
 Scarff, H. N., Douglas, Isle of Man
 Scertchley, Joseph, Anstey, Leicester
 Scholfield, James, Middleton, Rochester
 Scholfield, Joseph, Armitage bridge, near Huddersfield
 Schuler, Allen P., 1, Wellington road, St. John's Wood
 Scott, W. B., Manchester, Surgeon to the Board of Guardians and to the New Bailey Prison, Salford
 Scott, R., 2, Mornington rd., Regent's park
 Scott, J. B., Oakham, Rutland
 Scott, W., Ipswich
 Seabrook, B. T., Brighton, Surgeon to the Dispensary
 Seagram, F., Warminster, Wilts
 Seagrave, W., West's terrace, New Kent rd.
 Searle, G., 42, Cumming street, Pentonville
 Seaton, E. O., 77, Sloane street
 Seaton, E., Rochester
 Sebire, J. G., Portsea, Hants
 Secker, S., Wakefield
 Sedgwick, C., Hollingbourne, Kent
 Sedgwick, W., Maidstone, Kent
 Selby, J., Croom's hill, Greenwich
 Self, W., 8, Lucas place West, Commercial road East
 Self, James, Mile End road
 Sells, T. J., Guildford
 Semple, R., 2, Rufford's row, Islington
 Semple, W., 38, Upper street, Islington
 Semple, R. H., 3, San's buildings, Islington
 Seppings, E., Swaffham, Norfolk
 Seward, E., Bromyard, Hereford
 Sewell, R. R., Bridgewater, Somerset
 Sewell, C. B., 27, Walbrook
 Seymour, J., Filloughley, Warwick
 Sharke, E., St. Hillier's, Jersey
 Sharpe, Richard, Bermondsey
 Sharpe, John Taylor, Tunford, Nottinghamshire
 Sharples, W., Horncastle, Leicestershire
 Shaul, J., Docking, Norfolk
 Shaw, John, Mount Pleasant, Liverpool
 Shaw, B., Queen's road, Cambridge road, Mile End road
 Shaw, H., 142, Bishopsgate street Within
 Shaw, —, Newmarket
 Shaw, J., Hyde, Cheshire
 Shaw, H., Exeter, Devon
 Shaw, H., Russell street, Liverpool
 Shaw, H. E., Sutton Coldfield
 Shawe, H.
 Shea, J., 33, Great Charlotte street, Blackfriars road
 Shearman, E. J., Rotherham, Yorkshire
 Shearwood, Wm. H., Barrow-on-Humber, Lincoln
 Shebbeare, H., Odilham, Hants
 Sheffield, E., Grove, Hackney
 Shelley, J.
 Shelley, J. N., Epsom
 Shelton, J. B., Bromyard, Hereford
 Shelton, J. C., Worcester
 Sheppard, W. Y., Bristol
 Sheppard, W., Swindon, Wilts
 Sheppard, E., Worcester
 Sheppard, W. G., 104, Goswell road
 Sherriff, J. H., High street, Deptford
 Sherwin, J., Greenwich
 Sherwood, R., Chaddleworth, Berks
 Shillito, C., Putney
 Shillito, Charles, Bedford square, Brighton
 Shillitoe, R., Hertford
 Shillitoe, R. R., Hitchin, Herts
 Shipman, R., Grantham, Lincoln
 Shorland, G., Westbury, Wilts
 Shorland, H., Bristol
 Shorland, J., Westbury, Wilts
 Shorland, J., Bristol
 Shorland, J., jun., Bristol
 Shorten, C., Midhurst
 Shorto, J., Christchurch, Hants
 Shute, G., Greenwich
 Shute, T. H., M.D., 21, Wellington road, St. John's Wood
 Sidden, H., 78, Blackfriars road
 Silke, Wm. Murray, Stocy, Somerset
 Simonds, T. R., Gloucester place, Brighton
 Simoens, J., Twickenham
 Simpson, S., 39, King st., Camden Town
 Simpson, J., 4, High street, Bloomsbury
 Simpson, J. N., Staines
 Simpson, C., Stamford, Lincoln
 Sinclair, M., Manchester
 Sinclair, D., Halstead, Essex
 Sinclair, John, M.D., Clarence street, Liverpool
 Singleton, S., Bampton, Devon
 Sison, E., 19, Goswell street
 Sisson, A., Reigate, Surrey
 Sisson, A.
 Sissons, R., Huddersfield
 Skegg, Robert, 2, St. Martin's place, Charing Cross
 Skelding, Joseph, 11, Euston square
 Skelding, Thomas, 11, Euston square
 Skelding, William, 11, Euston square
 Skerrington, J., Asebourn, Derby
 Skinner, D., Headcorn, Kent
 Slack, Thomas, Salford, Manchester, Surgeon to the Salford Royal Dispensary and Union
 Sladden, J., Deal
 Sladden, J., Ash, Wingham, Kent
 Slater, G., Lechdale, Gloucestershire
 Slater, J. G., Gomersal, near Birstal, York
 Slayter, J. G., Woolpit, Suffolk
 Slayter, C. P., Woolpit, Suffolk
 Sleeman, P. R., Bristol
 Slin, W. S., Ampthill, Bedfordshire
 Sloman, S. G., Farnham, Surrey
 Slye, T. M., West Haddon, Northampton
 Slyman, W., Newtown, Montgomery
 Smales, R., 10, Terrace, Walworth road
 Small, W., Ramsgate
 Small, W., Nottingham
 Small, Thomas, Boston, Lincoln
 Small, W. G., Ramsgate
 Smart, J., 9, Newmarket terrace, Cambridge Heath road
 Smart, George, Hutton Bushell, Yorkshire
 Smart, T. B., Hutton Bushell, Yorkshire
 Smart, T. W., Cranbourn, Dorset
 Smart, T. T., Bristol, Medical Officer in the Bedminster Union
 Smerdon, C. W., Clifton
 Smethurst, T., 18, Mornington place
 Smith, John Sim, 19, Trinity square, Tower Hill
 Smith, C., 17, Nottingham street
 Smith, C., 56, Gracechurch street
 Smith, E., 7, Billiter square
 Smith, G., 3, Bennet street, St. James's
 Smith, J., 23½, Moorgate street
 Smith, Joseph, 38, Clapham road place
 Smith, Samuel, 114, Blackfriars road
 Smith, Thomas, 14, Bow lane
 Smith, W., 2, Dowgate hill
 Smith, W., 28, Artillery place
 Smith, W. H., 6, Clarence place, Clapham Rise
 Smith, C. J., 33, Brydges street, Covent Garden
 Smith, Thomas P., 31, Brick lane, Spital-fields
 Smith, J., 46, Westbourne st., Eaton sq.
 Smith, —, Hythe, Hants
 Smith, J. H., Manningtree, Essex
 Smith, J., Cirencester
 Smith, T., Crawley, Sussex
 Smith, T. H., St. Mary Cray, Kent
 Smith, Edward, Dursley, Gloucester
 Smith, J.
 Smith, Edwin, Cirencester
 Smith, W., Bristol
 Smith, R., Newark-upon-Trent
 Smith, C., Fulbeck, Lincoln
 Smith, C. B., Fulbeck, Lincoln
 Smith, W. B., Sudbury, Suffolk
 Smith, Robert, Whitechurch, Oxfordshire
 Smith, T., M.D., North street, Leeds
 Smith, W., Bedford street, Toxteth park, Liverpool
 Smith, R., Bishop's Lydeard, Somerset
 Smith, J., Coventry
 Smith, R., Portsea, Hants
 Smith, J., Great Hadam, Herts
 Smith, J., Wellingore, Lincoln
 Smith, W. L., Southam, Warwick
 Smith, D., Minchin Hampton, Gloucester
 Smith, T. W., Stroud, Gloucester
 Smith, J., Sunderland
 Smith, J. T., Stevenage, Herts
 Smith, E. A., Portsea
 Smith, J., Bristol
 Smith, C. B.
 Smith, R. W., Winchester
 Smith, J.
 Smith, W., Weyhill, Andover
 Smith, J., Weyhill, Andover
 Smitham, L., Sunderland
 Smyth, J. E., Lambeth
 Smyth, S. T., Gorleston, Suffolk
 Smyth, T. T.
 Snaith, T., Horncastle, Leicester, Surgeon to the Horncastle Dispensary
 Snaith, F., Holbeach
 Snell, Edmund, Milton Abbott, Tavistock, Devon
 Snell, Edmund, Lifton, Launceston, Devon
 Snow, W. E., 26, Tredegar sq., Bow road
 Snow, J., Lincoln, Surgeon to the County Hospital
 Snook, J. S., Collyton, Devon
 Snowden, G. S., Ramsgate
 Snowden, G., Ramsgate
 Sole, W., St. Neots, Huntingdonshire
 Soley, T. A., Windsor
 Sommers, J., Bedworth, Warwick
 Somerset, H. W., Milton, Wilts
 Somerville, H., Cannock, Stafford
 Soper, J., Ashburton, Devon
 Sopwith, H. L., Tunbridge Wells
 Southcomb, W. T., South Molton, Devon
 Southcomb, —, South Molton, Devon
 Southam, T., Precincts, Peterborough
 Southam, G., Manchester, Surgeon to the Salford Dispensary
 Southern, J., Ludlow, Salop
 Southee, Thomas, Cambridge
 Southwood, J., 9, Fore street, Cripplegate

- Spackman, R., Lutterworth, Leicester
 Spackman, W., Lutterworth, Leicester
 Sparke, J. G., 15, Finsbury place
 Sparkes, D., Cirencester
 Spaule, P., Hammersmith
 Spear, W., Totton, Hants
 Specker, L., Preston, Lancashire
 Spence, W., Dalton-in-Furness, Lancashire
 Spencer, J., Larkhall lane, Clapham
 Spencer, C., Whitechurch, Bucks
 Spencer, W. F., 25, Nelson street, Stoke Newington
 Spencer, T., 31, Myddelton square
 Spencer, C. T. M., Norwich
 Spencer, W., Newton Ferrars, Devon
 Spencer, J. H. F., Douglas, Isle of Man
 Spense, J., Manchester
 Spettigue, J., Exmouth, Devon
 Spettigue, J.
 Spicer, F., Stockwell, Surrey
 Spicer, F., Stockwell place, Stockwell
 Spooner, E. O., Blandford, Dorset
 Spong, W. N., Aylesford, Kent
 Sprague, J. H., Abbey street, Bath
 Spurgin, B., Great Bradfield, Essex
 Spurgin, C. S., Stratford, Suffolk
 Spurgin, T., Saffron Walden
 Spurrell, Flaxman, Bexley, Kent
 Squibb, Geo. J., 6, Orchard street, Portman square
 Squire, W., 6, Upper Portland place, Wandsworth road
 Squire, A., Lewisham, Kent
 Squires, W., Cranbourn, Dorset
 Stace, J., Southampton
 Stace, J. A., Southampton
 Stafford, W., Long Bennington, Lincoln
 Staff, C., 39, Roebuck place, Great Dover road
 Stallard, J. P., Leicester
 Stallard, J. H., Leicester
 Stanton, J., Clifton
 Stanger, G. E., Nottingham
 Starling, R. J., Hadlow, Kent
 Statter, W., Wakefield
 Stear, Thomas, Wisbeach, Cambridge
 Steadman, Silas, 60, Guildford street
 Stedman, R., Great Bookham, Surrey
 Stedman, W., Haselmere, Surrey
 Stedman, R.
 Stedman, J., Heacham, Norfolk
 Stedman, J. B., Lynn
 Stedman, J. R., Guildford
 Stedman, J., Guildford
 Stedman, S. S., Arundel
 Steed, W., Portsea, Hants
 Steddy, E., Chatham
 Steele, J., Brixton Hill
 Steele, H. C. B., Stoke Ferry, Norfolk
 Steele, S., Strood, Kent
 Steele, W. U., Reading, Berks
 Steele, J., Reigate, Surrey
 Steele, W., Abergavenny
 Steele, E. Y., Abergavenny
 Stephens, J. N., St. Keeverell, Cornwall
 Stephens, H. O., Bristol
 Stephenson, R., 6, Lower Southwick-st.
 Stephenson, —, Penhurst, Kent
 Stephenson, W., Rochester
 Stephens, T., North Shields
 Stevens, Richard, Markgate-street, Beds.
 Stevenson, G., Stretford, near Manchester
 Stewart, H. C., 1, St. John's Wood Grove
 Stewart, W. E., 1 A, Weymouth-st., Portland-place
 Stewart, R., Streatham, Surrey
 Stewart, J., Portsmouth
 Stewart, J., Seymour-street, Liverpool
 Stewart, Z. R., Torquay, Devon
 Stickings, G., Lenham, Kent
 Stiff, W. P., Nottingham
 Stilwell, C., Ewell, Kent
 Stilwell, G., Epsom
 Stirrop, J., Stafford
 Stirrop, J.
 Stocker, R., 44, Baker-street
 Stocker, J., Guy's Hospital
 Stokes, A. (M.D.), Kingswood, Wootton-under-Edge, Gloucester
 Stokes, Thomas, Nailsworth, Gloucester
 Stokoe, R., Peckham Rye
 Stone, T., Christ's Hospital
 Stone, J., Watlington, Oxford
 Stone, J., Manchester
 Stone, Erasmus, jun., Wentworth, Rotherham
 Storer, H., Bath
 Storey, H., 10, Grange-road, Bermondsey
 Story, John, Mile End-road
 Story, William, Mile End-road
 Stowe, W., Buckingham
 Stowe, J. P., Oddicombe, Kingsbridge, Devon
 Straton, Alexander, 1, St. George's-terrace, Kensington
 Streeter, J. S., 20, Harpur-street
 Stuckey, G., Martock, Somerset
 Sturton, W., Greenwich
 Stutter, W. G., Wickham Brook, Newmarket
 Sudbury, J. L., Cambridge
 Sullock, B., Teignmouth, Devon
 Sumpter, John, Pembroke Dock
 Surridge, T. L., Clifton
 Surridge, J., Wincanton, Somerset
 Surtees, J., Stamfordham, Northumberland
 Sutcliffe, C., Todmorden, Lancashire
 Sutherland, John, Southwold, Suffolk
 Sutherland, A., Corfe Castle, Dorset
 Suttod, H., Brighton
 Sutton, J. C., Greenwich
 Sutton, C. E., Wragby
 Sutton, J. H., Longden, Shrewsbury
 Sutton, A., Congleton, Cheshire
 Sutton, John, Newark-upon-Trent
 Svneman, R. W., Hounslow
 Swain, W. Paul, George-street, Devonport
 Swain, T., Leicester
 Swaine, J. C., Clifton
 Swapne, S. H., Bristol
 Swann, E., Weedon, Northampton
 Swayne, Bristol
 Sweeting, W., Abbotsbury, Dorset
 Sweet, J. S., Tenbury, Worcester
 Sweatman, G. T., Missenden, Bucks
 Swift, G., Eccleshall
 Sylvester, G., Trowbridge, Wilts
 Sylvester, G. M., Trowbridge, Wilts
 Symes, W., 3, Tavistock-square
 Symmons, F. B., Bures, Suffolk
 Symmonds, P. C., 15, Alfred-place, Newington
 Symmonds, W., 32, King-street, Covent Garden
 Symonds, F., Oxford
 Symson, T. C., Lincoln
 Tallan, B., Douglas, Isle of Man
 Tanner, R. E., South Molton, Devon
 Tanner, I., Ledbury, Hereford
 Tanner, R., 56, Manchester street
 Tate, Robert S., West Bolden, Gateshead
 Tatham, G., Wandsworth
 Tatham, C., 193, High street, Poplar
 Taylerson, John, Whitby, Yorkshire, Medical Officer of East Whitby district of Whitby Union
 Tay, E., 51, Park street, Grosvenor square
 Taylor, A., Spur street, Leicester square
 Taylor, C., High street, Deptford
 Taylor, W., St. John's street road, Clerkenwell
 Taylor, C., 18, Holland place, Clapham road
 Taylor, D., 37, Harleyford place, Kennington
 Taylor, J., 4, Ely place
 Taylor, Thomas, 289, Bethnal Green road
 Taylor, W., 88, Church street, Bethnal Green road
 Taylor, W., 80, York road, Lambeth
 Taylor, E., Romsey, Hants
 Taylor, W., North Shields
 Taylor, T., Kidderminster
 Taylor, W. G., Enfield
 Taylor, H. S., Guildford
 Taylor, J. H., Guildford
 Taylor, A., Kingsclere, Hants
 Taylor, James, Bristol
 Taylor, G., Wardwick, Derby
 Taylor, W. S., Leeds
 Taylor, G., Saxmundham, Suffolk
 Taylor, C., Spilsby, Lincoln
 Taylor, C., Troubridge, Wilts
 Taylor, T., Cricklade, Wilts
 Taylor, M. J., Dodington
 Taylor, W. S., Pulborough, Petworth, Sussex
 Taylor, E., Middleton
 Taylor, J. P., Earl's Colne, Essex
 Taylor, J., Earl's Colne, Essex
 Taylor, C. F., Bradford, Yorkshire
 Taylor, Henry, Nottingham
 Taylor, J. O., Everton, Liverpool
 Taylor, J. O., Preston, Lancashire
 Taylor, Joseph, Aybourne street, Manchester
 Taylor, William, Tywardreals, Cornwall
 Taylor, Henry S., Prescott street, Liverpool
 Taylor, William, St. Paul's square, Liverpool
 Taylor, Henry, Nottingham
 Teale, J., Salford, Manchester
 Teare, John, M.D., Ramsay, Isle of Man
 Teare, T. M., Ramsay, Isle of Man
 Teary, L., Leyburne, York
 Tebbitt, R., 240, Blackfriars road
 Teed, J. S.
 Teevan, J., 30, Chesham place
 Teevan, J., 16, Princes street, Kennington
 Tegart, E., 39, Pall Mall
 Tegart, E., jun., 39, Pall Mall
 Temple, A. R., Cambridge
 Terewest, W. (M.D.), Messingham, Lincoln
 Terry, J. J., Wittersham, Kent
 Terry, G. R., Hereford
 Terry, H., jun., Northampton
 Terry, C. M., Aylesbury
 Theed, E., Wansford
 Theed, F., Wansford, Northampton
 Thom, A., Dobcross, Oldham
 Thomas, Robert Brock, Maesteg, Cardiff
 Thomas, W. L., Horsham
 Thomas, C., 4, Claremont square
 Thomas, S. J., 68, London road, Southwark
 Thomas, Frederick, 3, Park Village East, Regent's park
 Thompson, W., 4, Kennington Green
 Thompson, C. M., Westerham, Kent
 Thompson, T., Barnsey
 Thompson, J., Ripon, York
 Thompson, C. I., Diss, Norfolk
 Thompson, H., Sunderland
 Thompson, F. D., Sunderland
 Thompson, William, Newark
 Thompson, J. N., Nottingham
 Thompson, W., Kingston, Hereford
 Thompson, J., Kingston, Hereford
 Thompson, E., Davenport, Northampton
 Thompson, J., Bideford
 Thompson, Joseph, Nottingham
 Thomson, C. E., Ross, Hereford, Surgeon to the Dispensary
 Thomson, J. B., Ramsgate
 Thoreau, W. H., St. Hillier's, Jersey

- Thornbill, J. H., Darlaston, near Wednesbury
- Thorn, R. L., 31, Upper Belgrave street
- Thorn, Jas. Wilkins, 9, Edward terrace, Caledonian road
- Thorn, J., 4, Mylne street, Claremont square
- Thornton, P., 8, Museum street
- Thornton, William Henry, Uxbridge
- Thornton, J., Holt, Norfolk
- Thorp, Henry, Barnsley, York
- Throsby, W. B., Leicester
- Thurnall, W., Bedford
- Thursfield, W., Bridgenorth, Salop, Surgeon to the Bridgenorth Dispensary and Union
- Ticehurst, T., Hastings
- Tidy, W. C., Cambridge heath, Hackney
- Tilley, S., 27, Paradise row, Rotherhithe
- Tinker, W., Hyde, Cheshire
- Tinker, F., Hyde, Cheshire, Medical Officer for the Hyde District of the Stockport Union
- Tinnery, W. S., Ottery St. Mary, Devon
- Tippetts, R., Dartford, Kent
- Tipple, F. A., Mitcham
- Tod, H. D., 5, Sol's row, Hampstead road
- Tod, H., Fore street, Cripplegate
- Tod, W., Fore street, Cripplegate
- Tod, J.
- Todd, G. M., 8, Watt's terrace, Old Kent road
- Todd, J. W., 6, Devonshire terrace, Globe road, Mile End road
- Tome, J., Salisbury
- Tomkin, T., Witham, Essex
- Tomkin, W. B., Witham, Essex
- Tomkin, T. M., Coggleshall, Essex
- Tomkins, C. J., 20, Colet place, Commercial road, east
- Tomlinson, James F., Maldon, Essex
- Tompkinson, R., Cheadle, Staffordshire
- Tompson, W. A., 15, Blackmore street, Drury lane
- Toms, W., Kingsbridge, Devon
- Tomson, W. A., 15, Tavistock street, Covent garden
- Toogood, W., Ashbourn, Derbyshire
- Tothill, T. C., Topsham, Devon
- Tothill, E. D., 8, Charles street, St. James's
- Toulmin, J., Mare street, Hackney
- Toulmin, F., Lower Clapton
- Toulmin, F. J., Upper Clapton
- Tounsens, T. D., St. Anne street, Liverpool
- Towne, A., 29, Kingsland crescent
- Townley, J., 7, Marlborough place, Kennington
- Townsend, H. M., 75, Newington causeway
- Tracey, J. M., 54, New Church street, Lisson grove
- Tracey, H., Dartmouth, Devon
- Travis, W. H., East Bergholt, Suffolk
- Trew, R. N., Steyning, Sussex
- Trennery, G. W., Penryn, Cornwall
- Tribe, B., Chatham
- Tribe, Edward, Kingsdown, near Bristol
- Trigg, H. R., Manchester
- Tripe, J. W., 7, King's place, Commercial road, east
- Trotter, C., Holmfirth, near Huddersfield
- Trousdale, W. M., West Butterwick
- Trowell, J., Crowland
- Trull, John, Leicester
- Trustring, C., Tunbridge Wells
- Tubbs, H. T., Upwell, Wisbech, Norfolk
- Tucker, S., West Lydford, Somerset
- Tucker, W., Allington, Bridport
- Tucker, J., Lyme Regis, Dorset
- Tucker, F. H., Halifax, York
- Tucker, J. H., 38, Berners street
- Tuckett, W. F., 11, Orford street, Chelsea
- Tulk, T., Sturminster, Newton, Dorset
- Tunaley, C., Millbrook place, Camden town
- Tunnaley, R. T., North Walsham
- Tupper, H., 1, Warwick square, Kensington
- Tupper, A. C., 5, New Burlington street
- Turner, H., 10, Bedford place
- Turner, J. W., 7, Bath place, Kensington
- Turner, R., Tunbridge Wells
- Turner, J., Wycombe, Bucks
- Turner, R., Petworth, Sussex
- Turner, S. C., Oakham, Rutland
- Turner, W., Hotham street, Liverpool
- Turner, J.
- Turner, E. P., Birmingham
- Turner, W. B., Singleton
- Turner, T. W., Deddington, Oxon.
- Turner, C. W., Minchin Hampton, Gloucester
- Turlay, E. A. (M. D.), Worcester
- Tuhn, S., Ripon, Yorkshire
- Tweed, J. J., 4, Alfred place, Bedford sq.
- Twedde, T., Dalston, near Carlisle
- Twedde, G., Houghton-le-Spring, Durham
- Twyning, W. H., Pembroke Dock
- Tybote, E., Great Haywood, Stafford
- Tyndale, E., Ashwell, near Baldock
- Tyrer, Robert, Liverpool
- Tyte, E. C., Harrow
- Underhill, Thomas, Tipton, Stafford
- Underhill, Thomas, jun., Tipton, Stafford
- Underhill, W. L., Tipton, Stafford
- Underwood, T., Castle Town, Isle of Man
- Upton, M. R., Ashley, Market Drayton, Salop
- Uthwat, E. A., Stroud, Gloucester
- Unwin, J. R., Alfred place, Brixton road
- Vaile, W. P., Southampton
- Vale, J. T., Birkenhead, Cheshire
- Vale, B., 43, Bethnal Green road
- Valentine, J., Somerton, Somersetshire
- Valentine, R., Ludlow, Salop
- Vallance, H., Brixton road
- Van Oven, B., 30, Gower street
- Vanderburgh, A. S., 39, Bethnal Green rd.
- Varah, G., Sheffield
- Vardy, J., Whalton, Northumberland
- Vardy, L. J., 53, Stamford street
- Varenne, E. G., Kelvedon, Essex
- Vawdrey, J. G., St. Austell, Cornwall
- Veasey, H., Woburn, Bedfordshire
- Verity, A. J., Bridgend, Glamorgan
- Verral, B., Newark, near Uckfield, Sussex
- Vickers, G. T., Warminster, Wilts
- Vickers, W. R., 32, Baker street, Surgeon to the police force
- Vidal, C. L., Aveley, near Romford, Essex
- Vincent, G., 109, Sloane street
- Vine, G., Hadlow, Kent
- Vinen, E. H., 164, Blackfriars road
- Vise, E., Holbeach
- Vise, C., Spalding, Lincoln
- Vise, T. B., Holbeach
- Vores, W., Aylesbury, House Surgeon to the Bucks Infirmary
- Varley, E., Roade, near Northampton
- Waddington, C. W., Bedford street, N., Liverpool
- Waddy, J. M., Birmingham, Senior Officer of the Birmingham Lying-in-Hospital and Dispensary for the Diseases of Women and Children
- Waddell, C., Stafford
- Wade, J. G., Wath-upon-Deane, Rotherham
- Wagstaff, M. F., 10, Walcot place, Westminster road
- Wainwright, Thomas, Barnsley, Yorkshire
- Wakefield, H., 1, Lansdown place
- Wakefield, H., 6, Albion-place, west, New road
- Wake, R., Southwold, Suffolk
- Wakeman, G., Thame, Bucks
- Wakley, T., M.P., 35, Bedford square
- Walker, J. W., 9, Gloucester terrace, New road, Commercial road
- Walker, W. N., Gt. Percy st., Pentonville
- Walker, E., Kington, Hereford
- Walker, B., Wakefield
- Walker, E., Wakefield
- Walker, J., Manchester, Surgeon to the Manchester Eye Hospital
- Walker, H., Horncastle
- Walker, B., Bottesford, Leicester
- Walker, G.
- Walker, T. K., York
- Walker, J., Chesterfield
- Walker, G., Sheerness
- Walker, D. R. G., Budleigh, Salterton, Devon
- Walker, T. O., Crick, Northampton
- Walker, W. G., Newick, Sussex
- Walcott, R. B., 8, York street, Baker street
- Wales, Rbt. James, Wisbech, Cambridge
- Wales, J. G., Downham, Norfolk
- Wall, A. B., Bayswater
- Wall, J. P., 6, Mount street, Grosvenor sq.
- Wallace, John A., Saville row, Mile End Road
- Wallace, R., 9, John's terrace, Hackney rd.
- Waller, A., 1, St. Mary Abbott's terrace, Kensington
- Wallis, John, Dorchester, Oxon
- Wallis, F., Bexhill, Sussex
- Walton, O. C., Broadstairs
- Walton, Henry C., Steele street, Liverpool
- Walthen, W., Anglesey, North Wales
- Walford, T. L., Reading
- Wandle, Samuel, Hereford
- Wansbrough, T. W., Chelsea
- Ward, M., Chelsea Dispensary
- Ward, H. W., Old Kent road
- Ward, N. B., 7, Wellclose square
- Ward, S. H., 35, Finsbury circus
- Ward, J. O., 21, Lower Phillimore place, Kensington
- Ward, F., Balham hill, Surrey
- Ward, J., Middlesbrough, Wakefield
- Ward J., Epsom
- Ward, G., Blythe, North Shields
- Ward, J., Birmingham
- Ward, Richard Charles, sen., Ollerton, Notts
- Ward, W. Squire, Willow hall, Ollerton, Notts
- Ward, Thomas, Southampton
- Ward, T., Southgate, Middlesex
- Ward, J., Kirkgate, Leeds
- Ward, J.
- Ward, W., Horncastle
- Ward, J., Sunderland
- Ward, J. B., Sunderland
- Ware, J. R., Southampton
- Warner, J., 1, Park place, De Beauvoir sq.
- Warner, C.
- Warner, T., Cirencester
- Warner, C. B., Cirencester
- Warren, H., Gravesend
- Warren, T., Princes Risborough, Bucks
- Warring, T. B., Cavendish, Suffolk
- Warry, E. T., Lyndhurst, Hants
- Warwick, R., Redbridge, Hants
- Warwick, W. R., Southend, near Rochford, Essex
- Wastie, H., 2, Kennington cross
- Waters, Allan, Exmouth
- Waterworth, —, Bengal place, Southwark
- Waterworth, H., Newport, Isle of Wight
- Watkins, Edwin, T., Towcester, Northamptonshire
- Watkins, R. W., Towcester, Northampton

- Watkins, A., 34, High street, Marylebone
Watkinson, Henry, Mirfield, near Birstal, York.
Wathen, J., St. David's, South Wales
Wathen, W. D., Milford, South Wales.
Wathing, T. F., Leominster
Watling, J. W. H., Wavertree, Liverpool
Watson, Robert M., Devonport
Watson, A., Deansgate, Bolton
Watson, S., Cottingham
Watson, G. C., Bedford street, north, Liverpool
Watson, Thomas, Holbeach, Lincoln
Watson, W., Leamington, Warwick
Watson, J., Birmingham
Watson, H., 4, Half-moon st., Piccadilly
Watson, W., Lutterworth, Leicester
Watson, A., 16, Mount pl., Whitechapel rd.
Watson, George H., 8, Brighton place, New Kent road
Watt, W., Deal
Watts, T., Frampton-on-Severn
Watts, T., jun., Frampton-on-Severn
Watts, R., Bristol
Watts, T.
Waud, H., Brigstock, Thrapston
Wavel, Dr., Newport, Isle of Wight
Way, W., 3, Russell place, Fitzroy square
Weatherhead, T., 13, Upper Baker street
Weatherhead, J. R., Wisbeach, Cambridge
Weatherly, F., Portishead, near Bristol
Weathers, George, Grove street, Camden Town
Weaver, J., Chester
Weaver, Lorrain, 2, Dowgate hill
Webb, R., 266, High street, Poplar
Webb, R. T., 18, Wyndham street, Bryanstone square
Webb, W. W., Gislingham, near Eye
Webb, C., Oxford
Webb, J. R., Rosehall, Bungay
Webb, M., Kitby, Wellington, Shropshire
Webb, F. W., Kitby, Wellington, Shropshire
Webb, M., jun., Kitby, Wellington, Shropshire
Webb, C. K., Exeter
Webster, J., Ramsgate
Webster, E., Oundle, Northampton
Webster, W. B., Ipswich
Webster, G. (M.D.), Dulwich, Senior Surgeon and Medical Officer of the Commercial and General Life Office
Webster, G., 78, Connaught terrace, Edgeware road
Wedley, G. D., Bedford
Wedd, R., Maidstone
Weebies, G., Hurstpierpoint, Sussex
Weeks, H., Chatham
Weeks, W. H., Sandwich
Weeks, R., Hampton lodge, Hurstpierpoint
Weeks, George, Hurst, Sussex
Weekes, G., Hurstpierpoint, Sussex
Weight, S., Mountsorrel, Leicester
Welby, E., Brant Broughton, Newark
Welch, E. A. K., Downton, Wilts
Welch, J. K., Christchurch, Hants
Welch, J. A., 1, Dalston terrace, Kingsland
Welch, R. R., Upper Clapton
Welchman, —, Southam, Warwick
Wells, J. H., Nailsworth, Gloucester
Wells, J. H., Nailsworth
Wells, W., Bourton-on-the-Water, Glo'ster
Wells, W., Cricklade, Wilts
Wells, Robert, Benenden, near Cranbrook, Kent
Wells, H., 31, London street, Fitzroy sq.
Wells, R. F., 1, Steward's street, Spitalfields
Welpham, P., St. Osyth, near Colchester, Essex
Welsh, S., Stanstead, near Stortford, Essex
West, G., 2, Hackney road crescent
West, W. J., Tunbridge
West, E., Camelford, Cornwall
West, W. J., Tunbridge
West, J. H., Poole, Dorset
West, C. J., Hull
West, R. U., Hogsthorpe, Alford, Lincoln
West, Henry, Fintona, Omagh, Ireland
Westall, E., Croydon
Westcott, P., Oundle, Northampton
Westlake, T. C., Andover
Weston, T., 47, Hoxton Old Town
Wetherell, N. T., Highgate
Whatman, J., Maidstone
Wheatcroft, T., Cannock
Wheeler, D., Chelmsford, Essex
Wheeler, W. L., Northfleet, Kent
Wheeler, J., Wokingham, Berks
Wheeler, T. L., Gracechurch street
Wheeler, T. R., 61, Gracechurch-street
Wheeler, Lowe, Kentish Town
Whicher, J., Petersfield
Whimper, G. M., Tillingham, near Maldon, Essex
Whitby, G., Swaffham, Norfolk
Whitby, E. F., Ramsgate
Whitcombe, P., Gravesend
Whitcombe, E., Cleobury Mortimer
Whitcombe, E. B., Cleobury Mortimer
White, John Grove, (M.D.) Alton, Hants
White, G. M., Nottingham
White, J., Finchley common
White, R., Portsmouth
White, W. T., Richmond, Middlesex
White, Thomas, Sunderland
White, E., 73, Lamb's Conduit street
White, G. F., 45, Gloucester terrace, New road, Commercial street
White, S., 1, Lamb's Conduit street
White, W., 21, Aldersgate street
White G., 50, Edgeware road
Whiteman, R. H., Putney
Whitfield, R., St. Thomas's Hospital
Whitfield, H., Ashford
Whitfield, E., Tolleshurst, D'Arcy, near Maldon, Essex
Whitehead, Trafford, Grosvenor street, Manchester
Whiteley, G. F., Ramsgate
Whiteley, J., Islington
Whittington, P., Tuxford, Notts
Whitmore, J., Cadogan terrace, Chelsea
Whitney, W. N., 12, Great College street, Westminster
Whittaker, J., Shaw, near Oldham
Whitterton, J., Lowmoor, Bradford, Yorks
Whittle, E. H., Brenchley
Whittle, B., 43, Norfolk street, Strand
Wiblin, John, Upper Tooting, Surrey
Wiblin, J., Southampton
Wickham, J. C., Didmorton, Gloucester
Wickham, E., 23, East road, City road
Wickham, E., Lowndes place, Holloway
Wigg, W. S., 1, Bridge row, Lambeth
Wiggington, P. J., Bingham, Notts
Wiglesworth, Henry, Southampton
Wildash, H. C., Wye, Kent
Wildash, J., Wye, Kent
Wilde, G. R., Mildenhall, Suffolk
Wilding, R., Blackburn, Lancashire
Wilkes, C., Charing, Kent
Wilkes, G. F., Ashford, Kent
Wilkin, G., Roscommon street, Liverpool
Wilkins, H., Ealing, Middlesex
Wilkins, W. W., Birmingham
Wilkins, J., Stockport
Wilkins, J., 10, Sloane terrace
Wilkinson, W. H. B., Southampton terrace, Pentonville
Wilkinson, E. E., Leicester
Wilkinson, J. S., Great Marlow
Willan, T., 38, Albany st., Regent's pk.
Willan, H., 38, Albany st., Regent's pk.
Willcon, C., Swanage, Dorset
Willey, T., Leicester
Willey, T., jun., Leicester
Williams, W., Mold, Flint
Williams, W., Wareham, Dorset
Williams, F., Bristol, House Surgeon to the Bristol General Hospital
Williams, E., Bristol
Williams, W. H., Sherborne, Dorset
Williams, H., Thrapstone, Northampton
Williams, T. P., Milford, South Wales
Williams, W., Exeter
Williams, J., Coventry, Warwick
Williams, E., Nelson street, Greenwich
Williams, W., Llandrillon, South Wales
Williams, J. L., Carnarvon
Williams, W. W., Hayes, Middlesex
Williams, R., Hayes, Middlesex
Williams, W., Guilsborough, Northampton
Williams H.
Williams, R., Chilton, near Abingdon, Berks
Williams, C.
Williams, W. R., Carnarvon
Williams, J., Brecon
Williams, J. B., Tetbury, Gloucester
Williams, W., Tetbury, Gloucester
Williams, Solva, Pembroke
Williams, J. W., Melton Mowbray
Williams, J., Dursley, Gloucester
Williams, J., 11, Dalston terrace
Williamson, Thomas, Nantwich, Cheshire
Williamson, W. C., Manchester
Williamson, J., Sharnbrook, Beds
Williamson, J., South Shields
Willis, R., Horrabridge, Devon
Willisford, F. W., 76, Cadogan place
Willmott, A. T., Ross
Willmott, T., 17, Upper Eaton street, Pimlico
Wilmot, P. M., Gainsboro'
Wills, G., Soham, Mildenhall, Suffolk
Wills, J., Donhead, St. Andrew's, Wilts
Wilson, F. H., Rye
Wilson, Thomas, Nottingham
Wilson, J. G., Bristol, sen., surgeon to the General Hospital
Wilson, T.
Wilson, J., Adderbury
Wilson, John, Whitby, Yorkshire
Wilson, H., Runcorn, Cheshire
Wilson, T., Hornsea, Holderness, York
Wilson, J., Broughton, Hants
Wilson, J., Lancaster
Wilson, R., 177, Ratcliffe highway
Wilson, G. J. M., 100, Great Portland st.
Wilton, J., Brighton
Wimpenny, J., Rawtenstall, Manchester
Winckworth, J., Horsham
Windsor, J., Manchester, sen. surgeon to the Manchester Eye Hospital
Wing, E., Bourton-on-the-Water, Gloucestershire
Wing, C., St. John's wood
Wimpenny, R., 27, Fetter lane
Winter, T. B., Brighton
Winterbotham, F., Castletown, Derby
Winzar, J., Salisbury
Wiseman, W. W., Ossett, West York
Witt, C., 30, Spring gardens
Woakes, E., Luton, Beds.
Wogan, W., Stafford
Wolff, A., 225, Shoreditch
Wollen, J., Painswick
Wood, B., New Romney, Kent
Wood, W. H., Cowbridge, Glamorgan
Wood, R., Walton-on-the-Hill, near Liverpool
Wood, A., Kirby Moorside
Wood, M. A., Ledbury
Wood, R., Ashton-under-Lyne
Wood, W., Catterick

Wood, F., 25, Bedford row
 Wood, T. C., 12, Sussex place, Hyde park Gardens
 Woodcock, G., Eardisley, Hereford
 Woodhouse, J., Hertford
 Woodman, W., Exeter
 Woods, F. B., Northampton
 Woods, G., Norton street, Liverpool
 Woodward, J. F. H. R., Sutton, near Ely
 Woodward, G., Bicester, Oxon
 Wooldridge, H., Southampton
 Wooldridge, W., Overton, Hants
 Wooldridge, T., Bedford
 Wooldridge, E., 171, Union st., Borough
 Wooldridge, W., 6, Jernyn street
 Wooler, W. M., Dewsbury, West York
 Woolley, G., 8, Brompton row
 Woolley, G. N., 8, Brompton row
 Woolmer, J. B., 11, Victoria road, Pimlico
 Woolnough, E. G., 15, St. Thomas's street, Borough
 Wooldridge, J., Overton, Hants
 Woolstenholme, —, Nottingham
 Wootton, W., Harrold, Bedfordshire.
 Wootton, H. R., 32, Fitzroy square

Wordsworth, J. C., Barnsley, Yorkshire
 Workman, O., Heckfield, Hants.
 World, R. R., 15, City terrace, City road
 Worth, T., Syston, Leicester
 Worthington, F., Rodney street, Liverpool
 Worts, William, Colchester, Essex
 Wrangham, W., Wragby
 Wrangham, J. D., Wragby
 Wride, G., Fovant, Wilts
 Wright, E., Chippenham
 Wright, T., Dudley
 Wright, J., (M.D.), Storey's gate, West
 Wright, Jas., F., Sheffield, Yorkshire, Lecturer on Midwifery and Materia Medica, and Surgeon to Sheffield Public Dispensary
 Wright, A., 6, St. Mary-le-Strand place, Old Kent road
 Wright, W. K., 3, Holland place, N. Brixton
 Wright, Princess court, Great George street, Westminster
 Wyatt, Peter, 3, Barnsbury Villas, Islington
 Wyatt, J., Cheltenham
 Wycherly, G. J., 50, Edgeware road

Wylds, J., Great Uplands, Salop
 Wyley, F., Coventry
 Wyman, W., Kettering, Northampton
 Yate, T., Tunbridge Wells Infirmary
 Yate, F., Godalming, Surrey
 Yate, J., Kensington Dispensary
 Yeldham, S., 9, Stamford street, Surgeon to the Royal South London Hospital
 Yeoman, John, Lofthouse, near Guisborough, Yorkshire, one of the Medical Officers of the Guisborough Union
 Yonge, W., St. Ives, Cornwall
 York, James, Wharnccliffe House, St. John's Wood road
 Youl, R., 7, Duke street, Grosvenor sq.
 Young, J. F., 10, Kennington place
 Young, T., 42, Piccadilly
 Young, G. H., 24, Cross street, Blackfriars road
 Young, R., Camberwell
 Young, T., South Shields
 Young, F. A., Hawkhurst, Sussex
 Young, J., Wells, Norfolk
 Young, E., Henley, Oxon
 Young, J., Leicester.

COMPENDIUM OF MEDICAL SCIENCE AND PRACTICE.

CLXXXI.—ON THE USE OF COLLODION IN ERYSIPELAS. By DR. SPRENGER.—Although it is still a disputed point whether erysipelas depends on a general affection, induced originally by some erysipelatous tendency, combined with gaströbilious symptoms, or whether it is a purely local process—a dermatitis—most weight seems in the present day to be attached to the view, that a local mode of treatment is the best adapted to this form of disease, and the one most frequently attended by favourable results. The principal aim of all modes of treatment is assuredly that of rapidly suppressing the local inflammation; as the inflammation is suppressed, the symptoms of constitutional disturbance will likewise diminish in intensity, and the more rapidly the local affection is subdued the less will be the general disturbance. Local erysipelas may, therefore, not inappropriately be compared with burns: for the treatment of both pathological conditions is nearly the same, both requiring that the outer surface of the skin, or the inflamed surface should be protected from the air, in order to promote the contraction of the vessels. It is with this object that we apply creosote, acids, plasters, ointments, solutions of gum and syrup, that we strew powders on the affected parts, apply bands dipped in starch, cotton wool, &c. Collodion combines all the good properties of these remedial agents, without exhibiting any of their injurious results; for while it completely excludes the external air, it prevents all transpiration, and thus deprives the inflammatory process of its means of support as it were; it adheres closely, and causes an equable compression on the skin and its vessels. Dr. Sprenger effected a complete and rapid cure by the use of collodion in six cases of erysipelas (four in the face and two in the leg). The collodion was laid thickly over the inflamed portions of the skin to the sound skin; in one case of erysipelas of the face, in which a portion of the scalp was implicated, collodion was poured over the hair in sufficient quantity to form a thick solid coating. The collodion was found to dry rapidly; the redness of the skin diminished in intensity on its application, and the erysipelas fully disappeared in all cases within seven days after the collodion was first applied. Dr. Sprenger used no other means. The erysipelas was observed to heal most rapidly on the leg.—*Deutsche Klinik*. 1850.

CLXXXII.—GENERAL PARALYSIS FROM ABSCESES IN THE CEREBELLUM. By SAMUEL CHAMBERLAINE, M.D., of Philadelphia.—A. B., æt. 40, married, of thin, spare habit, was attacked suddenly with a "fit" about four weeks ago, while walking in the street. Giddiness and involuntary clonic contractions of the left

arm are the chief symptoms; he did not fall; did not lose consciousness; got home of himself. On getting into bed, similar convulsive movements attacked the left leg. Dyspnoea and foaming at the mouth occurred. He has not been able to walk since, nor can he get from and to his bed without assistance.

His health has not been good since he had syphilis four years ago; but has been worse since he received a blow on the back of his head and neck, by a trunk from the top of a stage in which he was upset about two years ago.

Cups and blisters to nucha; purges and stimulating embrocations to his limbs had been prescribed and used; his headache has been relieved, and his limbs have regained some power.

March 20th, 1850. Present symptoms: His countenance has an expression of weariness rather than of pain. He lies upon his back, unable to rise, but can use both arms and legs. His movements are slow and difficult; his muscles do not obey his will promptly; his knit brow and fixed eyes show that all his energies must be concentrated upon his right arm, that he may carry his hand to mine; the left he moves more readily and more promptly. His grasp is tolerably strong in both hands; but stronger in the left. His strength quickly fails; he cannot maintain his grasp more than a few seconds; it is relaxed, but the fingers are not unclasped; it is only by directing his attention to it that he opens his fingers so as to free my hand from his.

Sensation appears to be normal. He says he feels my pinch equally in both arms, and has in both equally good perception of what he holds; he does not loose his grasp, nor require to keep his eye upon what he holds in order to retain it in his hand. The reflex power is therefore normal.

His animal heat is very soon lost; a few moments exposure of his arm out of the bed is sufficient to make it extremely cold; and this he says brings on a return of the "spasms of the arm." Yet he does not feel the cold, nor does he perceive the cold wall with his feet, which his wife sometimes finds completely chilled by it, and he not aware that they were against it; to the touch they are extremely sensitive, being tickled beyond his endurance by the least handling. His eyes are natural; pupils normally sensitive to light; not dilated. Tongue natural; is protruded with ease and promptness; not turned aside. Stomach rejects food frequently; a very slight exertion causes vomiting. Bowels extremely costive; were pretty regular till a month ago. Pulse extremely weak, small and very slow. Spine examined by careful pressure on each vertebra; there is no pain at any.

25th. Had a slight return of the "spasms of the arm" on yesterday. To-day he appears to be weaker; his voice is faint and weak; his mind acts slowly; he replies to me only after an interval of a minute or two; but his replies are then correct and to the

point. He protrudes his tongue slowly; seems to hold it out with his teeth; his lips remain grinning, only slowly regaining the natural position. He squeezes my hand with great effort; it evidently requires him to summon all the powers of his will to squeeze it at all. His left hand possesses more power than the right, but it costs him the same effort to use it.

29th. He has vomited every day; generally soon after eating, but always when he is worse or makes any effort to move himself; snappings have had no effect in restraining it. Hydrocyanic acid has appeared to arrest it. He has gained some strength since the "fit" of the 24th: his mind, as well as his muscles, acting now promptly.

30th. His wife reports a "severe fit" last night, and frequent vomiting. He is stupid; his brows contracted; his mouth quivers in the attempt to speak, but he says nothing. Cups to his temples; strychnine gr. 1-16th, three times a-day, and hydrocyanic acid to be repeated or not, according to the frequency of the vomiting.

31st. He exhibits more strength than I have seen in him before; he takes the tumbler and carries it to his mouth, which he was unable to do. His replies are prompt and immediate; he gives his hand quickly and carries it promptly to mine, and without the usual slow movements and unsuccessful attempts; rubs his hands together. I have not seen him use so much muscular action before. He yawns a great deal; says he feels tired. He vomited once to-day; but has retained a piece of chicken. His bowels are obstinately costive; he has had no stool for a week almost.

April 1st. His wife finds that he complains greatly of pain in his neck whenever she raises his head; pressure causes pain at third, fourth, and fifth cervical vertebrae.

6th. He has taken the strychnine at very irregular intervals, often refusing it altogether; has now taken about half a grain. There has been some apparent increase of strength; he has not required the same effort (with distortion of his face) to squeeze my hand; still he cannot regulate his movements. On attempting to put a pill into his own mouth, he could neither carry his hand directly to his mouth, nor, when he had reached it, could he open his mouth and his fingers at the same time; he either retained the pill, or let it fall while his mouth was still closed.

Emaciation has now become extreme; his belly is retracted to the spine, and presents a hollow beneath the ribs and below the diaphragm.

Vomiting has continued every day; sometimes but once, usually three or four times a day. The sense of fatigue is nearly constant with him; yawning frequent. The only pain complained of is in his scalp—a feeling of soreness rather than of pain; he makes his wife rub it constantly with spts. camphor.

His mind has wandered a little. His wife has often reported that he "talks strangely" to her and "is very irritable." His replies to me have been correct, but he requires time to collect his thoughts; sometimes says he is "trying to remember," when I repeat my question. Sometimes he has started with surprise at seeing me, and appeared to forget me for the moment.

11th. Has continued in much the same state. Irritability increases. Soreness in the scalp is more constant. Pulse grows weaker. Power of grasp less and less. He has passed his urine under him, and also one or two stools. Skin over the sacrum is becoming hard and sore. Pain over the cervical vertebrae is greater; he cries out if I press strongly there.

13th. I found his heart acting with violent impulse, and great rapidity; its sounds normal; pulse unusually strong; a dull, heavy pain at heart was all he complained of.

23rd. I found him with his head thrown back, his mouth fast closed, and his eyes staring wildly. He was alone, and may have just been suffering from one of his "fits," no one knowing it. His intellect was more dull than I had yet found; he would not speak, though he understood me, putting out his tongue and grasping my hand when told.

26th. His mind is clear again; he talks readily, and to the purpose; but soon begins to ramble, talking to persons who are not present; he appears to be very sensitive to every noise about him, in the street or in the house; his eyes not more than naturally sensitive to the light. His left side is now as completely paralyzed as the right. Sloughs have formed on the hip and sacrum. He passes his urine beneath, but from inattention or paralysis of the bladder, for I saw him pass it in full stream.

To-day I galvanized him. He has for several days refused the strychnine, and indeed all medicine. He never took the strychnine regularly.

May 6th. Galvanism has been applied several times with intervals of a day, according to his strength. At first there was some appearance of improvement, shown by more energy of will and

more prompt and ready movements, and by retaining his food for longer times.

Mild delirium has continued nearly constant; he talking continually to persons who were not present, and of things long gone by or that had never happened; and he raved so much about the galvanism that his wife wished it discontinued, thinking it caused the delirium.

11th. Died. Has continued to grow weaker since 6th, vomiting almost constantly. Brandy and water has been his only drink. Food of every sort he has refused for several days. Some intelligence and some power of motion remained this morning. He recognized his wife, squeezing her hand, and raised his head when his daughter's name was called. About noon he died.

Post-mort. examination forty-four hours after death.—Body emaciated to the last degree.

Brain.—Dura mater healthy, natural, pale; not adherent to cranium; arachnoid presented a few isolated spots of a slightly milky hue on the upper surface. Pia mater presented a moderate venous congestion. Substance of brain dry, very bloodless, of normal consistence; ventricles free of fluid; the plexus choroides remarkably pale.

Cerebellum.—Numerous encysted abscesses containing pure green pus were imbedded in the substance of the cerebellum, on both sides at the superior surface; at the base they were more numerous on the left side, the right containing but two or three, and these smaller; their size from that of a large marble to a pea; their walls a line perhaps in thickness, and sufficiently firm to permit the turning them readily out of the substance of the cerebellum. One or two near the surface were seen protruding before they were opened by the knife. The central lobe was not involved, nor did it appear to have been affected by them, neither by their pressure nor by their previous disease. There was diffused redness (minute arterial injection) on the surface of the convolutions, in a limited space on the left side, near the larger abscesses. Elsewhere the cerebellum appeared healthy to the eye.

Medulla Oblongata.—The grey matter was very pale, and not readily distinguished from the medullary; as was the case also with that of the spinal marrow; its substance appeared softer than natural; was readily wiped away with the sponge, breaking down very easily; there was congestion of the vertebral veins, probably cadaveric, as the blood was readily pressed out of them. Also a yellowish gelatinous substance in the loose cellular tissue between the dura mater and the med. spinalis, and the vertebral canal, of more than normal amount.

The Spinal Canal contained a small quantity of yellow serum.

Remarks.—The symptoms in connection with the post-mortem appearances agree perfectly with the received physiology of the cerebellum. Dr. Carpenter considers it "probable that the lobes are specially connected with the regulation and co-ordination of movements, whilst the vermiform processes are the parts connected with the sexual function." In this case, the seat of the abscesses was the lateral lobes of the cerebellum, and the most prominent symptom was the entire want of power to regulate his movements; as in the attempt to carry a pill to his own mouth. On another occasion, he attempted to give me his hand; he raised his arm and advanced it towards me, but the fingers remained extended perfectly straight and rigid, and would not grasp mine: after several attempts, he remarked, "They won't come down," and finally he endeavoured to seize and bend them himself with the other hand.

In addition to this, his movements were always slow and difficult; always slower than his will, and always required his attention to be fixed on each muscle (or set of muscles) before he could move at all. Both strychnine and galvanism (especially the former) appear to have recalled the power of combining his movements and to have increased the energy and the promptness of them. Their effects, however were soon lost; the strychnine he neglected, the galvanism he quickly became accustomed to.

The central lobe was unaffected, and accordingly there was no evidence that the sexual instinct was either increased or diminished. Nor were his habits, of which he spoke freely to me, such as to make it probable that there was previous disturbance of that instinct subsequent to the injury at the back of his head: nor before this were they such as to have been a co-operating cause.

The vomiting and intense soreness of the scalp are probably due to pressure by these abscesses upon the medulla oblongata and upon the origin of nerves distributed upon the scalp.

To the vomiting and the protracted starvation in consequence of it are due the extreme emaciation and delirium; the mild character of which, and its gradual increase, together with the normal condition of the brain, show that its cause was the want of nourishment. He seems really to have died of starvation, for there was nothing in the condition of his organs (so far as ex-

amined) to prevent his living till the abscesses were absorbed, could food have been supplied to him and retained; he seldom suffered from hunger, if ever, indeed; and usually refused his food when brought him, although he might have just asked for it. A feeling of extreme fatigue was the most he complained of, caused, doubtless, by the condition of his nerve centres (spinal marrow), which suffered by the pressure of the abscesses, and in common with his general system by the want of nourishment and by the long disease of its functions.—*American Journal of Medical Sciences*, 1851.

CLXXXIII.—ON FATTY DEGENERATION OF THE HEART, CHIEFLY IN REFERENCE TO SOME POINTS OF DIAGNOSIS. By J. BEGGIE, M.D., F.R.S.E., Fellow of the Royal College of Physicians of Edinburgh.—The injuries and diseases of the brain may be speedily—they are seldom immediately—fatal: the lesions and affections of the heart are often the cause of sudden death.

Yet, the numerous and ever-recurring instances of the extinction of life, which arrest the attention of all minds, by the striking rapidity of their course, or by the fearful suddenness of their issue, have been too readily regarded, both in the popular and in the professional view, as examples of the apoplectic seizure. The great centre of the nervous system has been too commonly considered the seat of the fatal lesion: the central organ of the circulation has, till lately, been too much overlooked in the large share it has taken in these appalling calamities.

Morbid anatomy has disclosed to us many alterations of the structure of the heart, which have proved the cause of immediate dissolution; and many more, which, either directly or indirectly, have led to a rapid consummation. Our improved means of diagnosis have taught us to anticipate such a termination to many of the cardiac affections with which we are every day familiar: our advancing knowledge of their pathology, and the aids of organic chemistry, may, ere long, point to more successful means for staying the progress, if we cannot avert the issue, of these severe and fatal lesions.

Microscopic observation has recently revealed to us certain remarkable changes in the muscular structure of the heart, of slow and insidious development; a fatty degeneration of its fibres—a morbid condition most difficult to detect during life, hitherto unassailed by any remedy, and which, there is reason to believe, has been productive of most fatal consequences, and the immediate cause of the sudden and unexpected demise of many distinguished men.

Histologists have recognised two varieties of fatty disease of the heart. In the one form, the fat, composed of oil cells, is deposited on the surface of the organ; it then gradually encroaches on, and insinuates itself between, the muscular fibres, so as greatly to conceal, and ultimately to impoverish and waste them. In the other form, the fatty matter, composed of granules and small oil-globules, occupies and fills the sheath of what was previously muscular fibre. The one variety consists in the *growth* of fat upon the muscular tissue; the other, in the *degeneration* of the structure itself into fatty matter. The two conditions appear to arise from different causes; the one is the result of an accumulation, in the blood, of the elements of fat, the other is the result of decay and disintegration.*

Rokitansky has described a third perfectly distinct species of fatty degeneration, occurring almost exclusively in hypertrophied hearts, which, at the same time, exhibit the remains of earlier endocarditis and carditis. In this form, the fat does not accumulate in masses, there being no fat vesicles inclosed within fasciculi of cellular tissue; but is beaded, as it were, in minute microscopic granules, closely interlaced and embedded among the primitive fibres of the heart's muscles.†

The growth of fat upon the heart has been described by some of the earliest writers on morbid anatomy, though they appear to have been ignorant both of its nature and consequences. The fatty degeneration of the muscular tissue has only recently attracted the notice of the British, French, and German authors. In our own country, Duncan, jun., Cheyne, and Adams were amongst the earliest observers. They have been followed by Smith, Stokes, Paget, Quain, and many others; while, on the continent, the subject has been illustrated by the labours of Laennec and Andral, of Rokitansky and Hasse, and other cultivators of pathological anatomy. It is not my purpose, however, to enter at any length into the literature or history of this formidable disease. The subject is full of pathological interest, but it has already been handled in an able manner by Dr. Quain, in whose recent essay will be

found an admirable summary of our knowledge up to the present moment. All that I contemplate now is, to review some passages in the life and death of two distinguished men, who have lately passed from amongst us, with the view of assisting to solve the question—Are there any symptoms diagnostic of fatty degeneration of the heart, by which its existence can be inferred, with anything like certainty, during life?

Dr. Chalmers died in his sixty-eighth year. It was my privilege to know him well, and to see him often, during the last fifteen years of his life. The world knows his genius, his talents, and his labours. To a mind of the highest order, and of wondrous energy, he united a hale and vigorous, a manly and robust, frame of body; and in the pursuit of the best interests of his fellow-men, he spared no exertion, either mental or physical, in carrying out the great object of his life. He was hardly ever incapacitated by infirmity, or loss of health, in prosecuting his enterprise; and from early manhood to green old age, even up to his latest hour, he toiled, and spent his energies and his strength. I mention these things to show, that the fatal disease which lurked within, which was progressive in its nature, and probably of long standing, could neither have produced serious uneasiness, nor proclaimed its presence by any unequivocal signs. One serious, one alarming illness, it is true, overtook him some years before his death; and though we can now look back, and somehow connect that first indication of disordered circulation with a well-grounded suspicion of commencing cardiac disease, yet his complete, his perfect recovery, and the absence ever afterwards of any manifestation of a like kind, were calculated to lull and repress all apprehension of coming danger. The attack to which I refer happened in the winter of 1834, thirteen years before he died. It was thus:—He was engaged in the early part of the day in attending a meeting of the Presbytery of Edinburgh, and had taken an interest and share in the subjects of discussion. On returning home with a friend, he was suddenly seized, on the street, with loss of power and diminished sensation over the right side, the arm and leg being chiefly affected. He felt, to use his own description, as if instantaneously a large weight of books had been placed in one of the pockets of his great-coat, and so thrown him entirely to one side. He must have fallen to the ground, but his friend supported him, and had him conveyed to a neighbouring house, and, after a little, to his own home, where I was called to see him immediately on his arrival. I found him in bed, calm, but impressed with the conviction that he was struck down by a formidable disease. His mind was quite entire; nor did it suffer in the least during the course of his illness. His speech was somewhat affected, his articulation imperfect. The muscles of the right side of the face were partially paralysed; those of the arm and leg decidedly so. Sensation over the whole of the right side was much impaired, and particularly over the thigh and leg, which he continued to beat firmly with the left hand, in the hope, as he said, of recalling the banished sensation. The face was pale, the skin cool, the pulse soft and frequent. There was no headache or giddiness, nor any pain or uneasiness beyond what has been described. The treatment varied in nothing from that usually pursued in such cases,—moderate bleeding, purging, diaphoretics, rest, quiet—in a word, the antiphlogistic plan. Under this ordeal he daily improved; sensation and motion were gradually restored, and, after a few weeks' confinement, he returned to his avocations, and engaged as heartily and laboriously as ever in his literary and professional duties.*

Events in the church, of the deepest moment and most intense interest, by and by thronged upon him and occupied his mind; and negotiations, in high quarters, connected therewith, pressed upon his attention year after year. He was found equal to the time. Perhaps it might be said with truth, that these matters to which I allude told upon him. He was now approaching his grand climacteric, yet he was firm and robust. With accumulating years came a disposition to obesity; and with the silver grey on the massive forehead, came also the pallid and somewhat sickly look of fading health. Yet he seldom complained; or, if indisposed, it was only by some trivial ailment arising from indigestion. He was sometimes sick at stomach, but he was never faint, nor ever swooned away. He sometimes manifested a sense of exhaustion; but even then, it was remarked that, with uncommon alacrity, he could, when occasion required, rouse himself to great mental or bodily efforts. He had no præcordial pain, or distress in breathing; no palpitation of the heart, or intermission of the pulse. He ascended heights with wonderful facility; he slept on either side, and his rest was calm and refreshing. Had any symptoms at this time called for exploration of the chest, we

* Quain. *Medico-Chirurgical Transactions*, vol. xxxiii. p. 151.

† *Manual of Pathological Anatomy* (Sydenham Society), vol. iii., p. 315. *Hasse's Pathological Anatomy* (Sydenham Society), p. 170.

* During the month of June following, Dr. Chalmers apprehended a renewal of similar symptoms; but the threatened attack passed away, and never returned.

might perhaps have discovered, by the assisted ear, that the impulse of the heart was feeble and indistinct: and that its first sound was imperfectly heard. We might, perhaps, have conjoined these signs with the soft, but not feeble pulse, the pallid countenance, the time of life, and the ready disposition to take on fat, and so have persuaded ourselves that degeneration of the muscular tissue had already made progress. But it could only have been a reasonable conjecture: there were no symptoms so unequivocal as to lead us to infer, that this particular lesion was to prove the cause of death. The manner and circumstances of that event I shall briefly relate.

Early in May 1847, when in the enjoyment of his usual health, Dr. Chalmers repaired to London to give evidence on an interesting question before a committee of the House of Commons. He preached on three successive Sundays with all the eloquence and energy of former days; and during the week was much engaged with the business of the committee. His minute and lengthened examination, the manner in which it was conducted, and the deep, the intense interest which he felt in the whole proceedings, bear witness that even then, when within a few days of his death, he had no symptoms of serious illness. On his way homewards, he visited some near relatives in the south of England, and reached Edinburgh at the close of the month in excellent health and spirits. He attended public worship on Sunday the 30th; he met his family in the usual exercises of the day; and retired to rest at an early hour; being engaged on the following day to read to the General Assembly a report, which had occupied much of his time and thoughts. On Monday, the 31st, not having responded to the usual call in the morning, the chamber was entered, and he was found cold and lifeless. I saw his body before it was disturbed. It lay in the half-recumbent posture; the head supported by pillows; the arms folded on the breast. The bed-clothes were scarcely disordered; and on them rested a basin, which had received the contents of the stomach. He had been overtaken by sickness and vomiting; but at what hour it is impossible to fix. This last circumstance of vomiting, coupled with his former paralytic attack, rendered it very probable that some cerebral lesion was the cause of death.

The examination of the body was conducted by Dr. Bennett on the evening of the following day, the first of June—the weather at the time being unusually sultry. Dr. Bennett has furnished me with the following description:—

External appearances.—The body was fat and robust; the head large; the chest broad. Putrefaction had taken place to a considerable extent. The features were swollen, bloated, and of a purple colour. The neck and upper part of the chest were of a green colour, and emphysematous.

Head.—The integuments of the scalp unusually thick; on dividing them, fluid blood oozed from their cut surfaces. The cranium was of great thickness and density. On raising the calvarium, it was everywhere fully a quarter of an inch thick, and in some places three-eighths of an inch; it was unusually weighty. The two surfaces of the arachnoid membrane were pretty firmly united superiorly, and were lacerated on separating the brain. The angle formed superiorly where the falx turns down, was crossed on both sides, from before backwards, by firm bands of chronic lymph and fibrous tissue, some of which were nearly an inch long. A calcareous deposit, the size of a pea, was situated about the centre of the falx. The cerebral arachnoid was thickened, and perfectly opaque in the immediate neighbourhood of some of the larger meningeal vessels, presenting, on removal, a white glistening appearance; it was easily removed from the cerebral convolutions, which, superiorly, were large, and the sulci deep. The brain weighed fifty-three ounces avoirdupois, and in its structure was everywhere healthy. The choroid plexus contained small groups of simple cysts. A large quantity of fluid blood came from the divided arteries at the base of the brain.

Chest.—Both lungs were slightly adherent at their apices by one chronic adhesion of limited extent. On the left side, the pleura at the seat of adhesion was thickened, over an extent the size of a shilling, about one-eighth of an inch. The serous surfaces and lungs were otherwise perfectly healthy. The pericardium was healthy. The heart was flabby and unusually soft. The coronary artery was loaded with calcareous deposit, much contracted, and in one place obliterated, presenting considerable resistance to the knife. The heart contained no blood; its endocardial lining was deeply stained of a reddish and purple colour; the valves were healthy. The walls of the left ventricle, towards the base, and at their thickest part, were only half an inch thick; at the apex, in one place, only one-eighth of an inch thick; the surface of the section showed that the muscular substance had undergone the fatty degeneration. In some parts of the ventricle half the substance was completely fatty; in other parts,

nearly its whole thickness was fatty, with a thin line one-sixteenth of an inch thick of muscular substance only remaining. Even this muscular substance was of a pale and yellowish colour. The right ventricle was unusually thin, and, superiorly, was so soft, that it broke down under the finger, and could be torn like a soft pulpy substance. Everywhere the substance of the organ was soft and friable.

Abdomen.—Liver small, of a dirty olive-green colour throughout. Gall-bladder distended with yellow fluid bile. Spleen small; on section, presenting a black colour. The omentum and sub-peritoneal cellular tissue were greatly loaded with fat. The kidneys were imbedded in a surrounding mass of fat an inch thick, they were soft and flabby, of a dark mahogany colour, but in texture healthy. The stomach, internally towards the larger curvature, of a greenish hue, with slight extravasation of blood below epithelium. Intestines were healthy.

Microscopic examination.—The substance of the heart throughout consisted of fatty granules. The muscular fasciculi could scarcely be seen, although here and there traces of the longitudinal fibrillæ could be observed. No transverse striae were anywhere visible.

I should mention that Dr. Bennett suggests, as the probable cause of the want of blood in the heart, that it had drained away, in its fluid and putrid state, from the divided cerebral vessels, during the examination of the contents of the cranium.

Before venturing a remark on this interesting case, I would recall to the recollection of the Society the history of another eminent individual, who was known to many of us, and whose life and death, in many respects, bore a remarkable resemblance to those now related.

Dr. Abercrombie died in his sixty-fifth year. I knew him long and well. I had the happiness of living, during many years, under his roof; and was witness, through his life-time, to his zealous professional labours, his unwearied industry, and his active benevolence. He enjoyed, during a long series of years, uninterrupted health; so that I can scarcely call to remembrance an occasion on which, for more than a few days together, he could be said to have been unfitted for professional duty; till the illness, which we well remember, filled his mind with the most serious apprehensions in regard to his future usefulness. It was in the winter of 1841, three years before his death, that, in driving to a professional engagement, he was suddenly seized with loss of power and impaired sensation over the left side, but without the loss of consciousness, or any affection of speech. He immediately returned home, and gave orders for the abstraction of blood by cupping. Dr. Hunter, who was called to him at the time, found him under great anxiety, complaining of præcordial uneasiness, and slight headache, with frequent sighing, cold skin, and pallid countenance. The pulse was frequent and small at first, but, after a while, it subsided in frequency and rose in strength. Blood was taken both from the temple and arm to a large extent, and active purging was pursued by the patient's desire. I need not, however, pursue the details of this attack, which have been given elsewhere,* further than to state, that it was Dr. Abercrombie's decided impression that his illness was paralysis, connected with cerebral disease, and that impaired mind, and enfeebled bodily power were to be the lasting consequences. It certainly never occurred to any of his medical advisers to connect the symptoms with deranged circulation, arising from a damaged heart. He did complain, I remember well, of præcordial uneasiness—it never amounted to pain—and of something more than uneasiness in the left arm and shoulder, and at the base of the scapula; but the circulation was regular, though feeble, and the feebleness might readily have been accounted for by the active measures which he himself employed, and the scanty fare to which he subjected himself,—treatment which no long time afterwards was found to have been entirely misplaced.

Dr. Abercrombie recovered from this attack, and in the course of a few weeks was able to resume his professional duties. He continued pallid, however, and carried about with him somewhat the air of an invalid, but his mind was as active and intelligent as ever. Previous to this attack, he had been observed to have become rather corpulent and fat. He continued to improve, and his health was considered completely re-established. He never had any threatening of return of similar symptoms during the three succeeding years, nor any indication of latent disease, beyond what was remarked by Dr. Alison, when, in accompanying him up stairs a few days before his death, he observed that he was breathless. On Thursday, the 14th November, 1844, Dr. Abercrombie was in his usual health; he engaged with his family in the devotional duties of the morning; he breakfasted with appe-

* Edinburgh Medical and Surgical Journal, vol. lxxiii., p. 227.

tite, and, after visiting a domestic in the family, he retired to the water-closet. He was there sufficient time to justify the suspicion that some illness had overtaken him; and, on opening the door, he was found extended on the floor in the arms of death. A few convulsive sobs were heard,—and life departed.

The body was examined by Mr. Goodsir, whose account of the morbid appearances I take the liberty again of laying before the Society.

"Head.—The skull-cap was thick. The crista galli, the posterior clinoid processes, and the bones of the head generally, were powerfully developed. The brain was softer than might have been expected at the time of the examination (fifty hours after death). There were no traces of old or recent effusions of blood. The internal carotid, the circle of Willis, and all the arteries of the organ were studded with much atheromatous deposit; and the internal carotids, at their last curve, were slightly dilated. The organ was of great size, and weighed sixty-three ounces avoirdupois. The ventricles were capacious, without an increased amount of serum, which appeared to correspond to the great size of the cavities.

"Heart.—The pericardium contained a large clot of blood, enclosing the heart as a mould. On the posterior surface of the left ventricle, two-thirds from its base, and about an inch and a-half from the septum, there was a fissure or rent, a quarter of an inch long, in the direction of the fibres of the ventricle, with ragged and uneven edges. Towards this fissure a considerable branch of the left coronary artery passed, but did not enter into it. In the fissure the ruptured orifice of a vein was visible, and a bristle introduced into it passed on towards the base of the ventricle, and appeared on the cut surface of the posterior wall of the ventricle, made on opening the heart. In the neighbourhood of the rupture two irregular echymotic spots were situated, through which passed branches of the coronary artery. These spots consisted of effused blood, but their connexion with ruptured vessels could not be distinctly made out. The serous membrane over them was quite entire. Both coronary arteries were much dilated as they passed off from the aorta. Throughout their course they contained in their walls much atheromatous matter, but were not ossified. The aorta and its semilunar valves also contained a considerable amount of the same deposit, but the former was not enlarged. The heart was slightly enlarged and dilated, rather loaded with fat, and remarkably soft, as if from interrupted nutrition. All the cavities of the heart were found empty. Extensive adhesions of the right pulmonary and costal pleurae. The other viscera were healthy."

When the case of Dr. Abercrombie was originally brought under the notice of this Society, immediately after his death, comparatively little attention had been given to the peculiar lesion which terminated his life so suddenly and so unexpectedly: indeed, fatty degeneration, as now understood, had scarcely been recognised, though, on the occasion referred to, Mr. Goodsir distinctly announced his opinion, that the remarkably soft and flabby state of the heart, as if from interrupted nutrition, was owing to that morbid change. We are now better informed in regard to the history of the atheromatous deposits in the blood vessels,—which are only changes contemporaneous with the more serous lesion,—and with the rupture of the muscular fibres, which is now recognised as one of the most common terminations of fatty heart. Mr. Goodsir has kindly communicated to me the result of a microscopic examination made subsequently to the drawing up of his report of the inspection of the body, from which it appears, that the muscular fibres of the ruptured portion of the ventricle (alone examined) had undergone the fatty degeneration, being here and there interspersed with fatty granules, generally in transverse rows,—and that there were masses of fat cells or globules at intervals,—while some of the fibres were nearly empty.

Dr. Abercrombie and Dr. Chalmers were both of the age when the tendency to fatty degeneration has been shown to be most prevalent. Among 83 cases collected by Dr. Quain, death occurred in 14 between the ages of 50 and 60; in 18, between 60 and 70; and in 14, it occurred between 70 and 80. These eminent men had also indicated a proclivity to the disease by a constitutional tendency to take on fat, and in doing so, to assume the pallid and sickly look of diseased nutrition—facts which have been remarked by many observers. They terminated their lives in the manner most common to those who suffer from it, the one by rupture of the heart, the other in syncope. Of Dr. Quain's 83 cases, 28 died by the former, and 26 in the latter mode.

It has been remarked by Mr. Paget, that the principal character which all the cases of fatty degeneration of the heart seem to present, is, that they who labour under this disease are fit enough for all the ordinary events of calm and quiet life, but are wholly unable to resist the storm of a sickness, an accident, or an opera-

tion.* There may be much general truth in the statement; and in the two cases just recorded, it is worthy of remark, that up to the hour of death the distinguished individuals were actively engaged in the labours of the two most arduous and onerous professions, and were overtaken, as in other recorded instances of this particular lesion—the one, it is believed, by the act of vomiting; the other, by an effort at stool.

I have purposely selected these two cases, because their previous history was well known; the every-day life of the individuals for weeks, and months, and years, was noted, before the final event arrived: the clinical history of the disease is short, but it is complete. "It is not the manner of death that it is profitable to understand in this disease," says Dr. Latham, speaking of a closely allied affection of the heart, "but the manner of life; how life and the great organ of life are affected by it, at its beginning, and during its progress, and what indications they show, enabling us to minister to it remedially." "The two cases which I have related," the context is still applicable to my present object, "surely do not contain what we are in search of, in respect of the particular disease; but they contain, nevertheless, matter for reflection. They convey, not a clear understanding, but some conceivable notion, how life itself, and the very attributes and conditions of life, in different organs, may interfere to prevent that perfect knowledge of diseases which we seek from their symptoms. * * * They show a disease so tardy and so gradual, as to convey no perception of what it is to the blood-vessels or to the nerves, and to awaken no sympathy in them, and call forth no signs from them of its existence. Its whole clinical history is comprised in its fatal event."†

Dr. Quain, however, in referring to the fact that fatty degeneration of the heart is said to be frequently found after death, where its existence had not been suspected during life, has expressed the opinion, that such cases would not often be met with, if a full inquiry could be made into their symptoms; and then goes on to remark:—"I feel the truth of this observation, more particularly in those cases which occur in the progress of advancing life, when, whilst the system generally keeps up its powers tolerably well, the heart suffers from some local cause, such as diseased coronary vessels. In those cases the balance between the system and heart is lost, and phenomena as clear and as pointed as any that can indicate the nature and seat of disease are developed."‡

What reply do the two cases which have now been related to the Society make to this unqualified statement? The subjects of these cases had made progress in advancing life. They expired in a sudden and unexpected manner; and examination after death disclosed the hidden cause in the peculiar lesion of the heart, accompanied by the morbid condition of its vessels, to which Dr. Quain refers; yet, during life, neither of them exhibited any of those clear and pointed phenomena to which he alludes. The testimony of Dr. Abercrombie is peculiarly valuable in relation to this point; himself a careful and long-experienced observer of the phenomena of disease, and anxiously alive to all manifestations of it in his own person, he never acknowledged, as I firmly believe he never felt, any of those symptoms of degeneration of the heart indicated by Dr. Quain—symptoms which, I apprehend, will be found to be more intimately connected with those other morbid conditions and lesions of the organ which usually co-exist with fatty degeneration. Let us shortly inquire what those signs, general and physical, are, which are said to denote this degeneration of the heart, with the view of discovering any modification of their features in the history of the cases now under consideration.

First in order, have been mentioned symptoms of cerebral congestion, such as *giddiness, drowsiness, coma*. No symptoms of this kind were at any time witnessed; and though manifestations of interrupted circulation in the brain might have been expected to flow from the want of muscular power in the heart to propel the blood brought by the veins from the head, yet never, if we except the attack of paralysis which both Dr. Abercrombie and Dr. Chalmers experienced long before death, was there any evidence of cerebral congestion. It may, however, be a subject of interesting inquiry, how far these paralytic seizures, which we have noticed, were connected with early changes in the muscular fibres of the heart; though, on the presumption that they stood in

* I have lately seen, with Dr. Richard Mackenzie, a respectable citizen, and approaching the age of 75, who had recently submitted to be cut for stone, and had a large calculus, weighing nearly two ounces, extracted by Mr. Syme; and who, at the period I saw him, was labouring under an attack of pneumonia, from which he perfectly recovered, while, during many previous years, he had manifested the signs of fatty heart, so far as these can be diagnosed during life, including also the well-marked arcus senilis.

† Lectures on Diseases of the Heart, vol. ii., p. 160.

‡ Medico-Chirurgical Transactions, vol. xxxiii., p. 160.

the relation of cause and effect, it is difficult to account for the exemption from future attacks which both patients experienced, the one during the three, the other during the thirteen last years of life.

The occasional occurrence of apoplexy and palsy, in connection with fatty degeneration of the heart, may more readily be traced to other morbid conditions of the organ, which co-exist with that particular degeneration, than to the degeneration itself, such as hypertrophy of the left, and dilatation of the right, ventricle; more especially, when these again are associated with disease of the blood-vessels of the brain.

Faintness and syncope are next recorded as symptomatic of fatty degeneration of the heart; but they were not observed in either of the cases now related; though there is reason to believe, in the absence of other causes to account for death, that a fatal syncope at last overtook the distinguished individual, the subject of the first sketch. But syncope is not an uncommon symptom of other affections of the heart; and may naturally be expected to arise where the left chambers of the organ are deficient in muscular power in transmitting the blood to the brain, whatever may be the immediate cause of this loss of power, whether the growth of fat upon the organ, the degeneration of its muscular tissue, or the dilatation and thinning of its walls from other morbid changes. It has been observed that the peculiar degeneration, we are now considering, is at times confined to one ventricle, and at other times to its fellow, and that often both are equally affected. May not the prevalence of head symptoms at one time, and of syncope and faintness at another, be accounted for by the part of the organ implicated? When the right ventricle is softened and wasted, comatose symptoms may be looked for, in consequence of the interruption to the free discharge of blood from the brain: when the left ventricle suffers, then syncope may be expected, from the want of full and free circulation within the head: while, when the chambers of both sides equally participate in the degeneration, the circulation may be feeble and slow, but it will not be liable to those disturbances which are likely to arise from the balance of power being lost between the two sides of the heart.

Shortness of Breathing is another symptom frequently observed in those labouring under fatty heart; but it was not present in either of our cases. I have already remarked, that Dr. Chalmers continued to the last to ascend heights with wonderful facility; and Dr. Hunter informs me, on the best authority, that Dr. Abercrombie, during the autumn which preceded his death, was in the habit of ascending the hills in the neighbourhood of his summer residence, without experiencing any difficulty of breathing; and all, who were accustomed to meet him professionally, must remember the quick and alert manner in which he mounted to the bed-room floor, in cases of sickness. It has, however, been noticed, that an experienced observer had, on one occasion, and that a few days before his death, remarked that, in ascending the steps of his own house, Dr. Abercrombie was breathless. It was the first and the only remark of the kind; and perhaps it is right to mention, that it was made at a time when Dr. Abercrombie was recovering from a bronchial attack which had confined him for a day or two to the house. But we must expect dyspnoea in cases of softened and degenerated hearts; it is not, however, a constant symptom, and, even when present, may be found to be connected with other co-existing hindrances to the free circulation through the lungs.

Præcordial pain is another of the characteristic symptoms of this disease of the heart; and certainly has been acknowledged by many who have fallen victims to it. But it is a remarkable fact, that in the case both of Dr. Abercrombie and of Dr. Chalmers it was entirely wanting. The former was sensitively alive to every morbid feeling; the latter was not indifferent to suffering, but, with the exception of the præcordial uneasiness which for several days affected Dr. Abercrombie during the illness which we have referred to as occurring three years before his death, he was never known to complain of pain, nor had he at any time the least suspicion that he was the subject of cardiac disease; while, in the instance of Dr. Chalmers, I cannot call to recollection the smallest complaint of pain, anxiety, or distress in the region of the heart. Both had the coronary vessels extensively diseased; but neither suffered the symptoms of angina pectoris, unless it were in the moments which preceded dissolution.

Functional derangement of the liver and chylopoietic organs has been noticed as a constant attendant on this form of heart disease. Hasse informs us that, so far from being a merely local morbid condition, as some pathologists believe, it is the result of various affections in other organs; and, though not manifested by any specific local symptoms, its presence may, nevertheless, be inferred with tolerable certainty from collective symptoms referable to other parts of the body. Thus he mentions that, in functional

disturbance of the larger organs of secretion, and especially of those engaged in the elaboration of venous blood, we meet with fatty encumbrance of the heart in its second stage; the anomalous condition being then conjoined with other changes, all dependent more or less directly upon hepatic or pulmonary disease, or, at any rate, indicative of venous plethora.* Various morbid conditions of the liver are noticed among the collected cases of Dr. Quain; and in the instance of Dr. Chalmers this part was also found diseased. It was the organ, especially in his later years, which was most readily disturbed, being quickly influenced by errors in diet, or by stimulating beverages; hence he was led to abandon the use of wine and fermented liquors, and to confine himself entirely to water. I may take the liberty of recording an interesting fact in his history, which he communicated to me, and which bears upon our present subject,—namely, that the continued use, for a few weeks together, of a mixture of spirits, water, and sugar, was invariably attended with a manifest increase of fat, which subsided on the disuse of the stimulating drink;—a fact which, taken in connexion with the circumstance of fatty heart being frequently found in those addicted to the free use of spirits, may lead to the suggestion of prophylactic measures in the case of those who appear to labour under that disease.

The state of the pulse cannot be depended upon as a diagnostic mark of fatty heart. In some cases it has been found irregular, in some weak, in others slow; but it is subject to much variety, according to the complications of cardiac disease, which concur with this degeneration of the muscular fibre. In both Dr. Abercrombie and Dr. Chalmers, the natural pulse was soft and weak; it was never irregular, nor at any time of such a character as to raise any apprehension of organic disease. Hence, in neither case was auscultation employed as a means of discovering the physical signs which are said to belong to fatty degeneration. Admitting, however, the discovery of a feeble impulse, a feeble first sound, and extended præcordial dullness,—signs which the state of the heart after death might have led us to infer existed during life,—still these, when combined with any general signs recognised during a long course of years, could not have led to a distinct and satisfactory diagnosis; while I am willing to acknowledge that, taken in connexion with the age of the individuals, their pallid complexion, and tendency to obesity, they give room for the conjecture, that the great organ of life in both was yielding, through the progress of time, to those organic changes which mark the decay of its structure, and foretell the not distant cessation of its long-continued functions. — *Edinburgh Monthly Journal*, March, 1851.

CLXXXIV. — SINGULAR CASE OF OBSTRUCTION OF THE BOWELS; WITH SOME REMARKS UPON THE USE OF TARTAR EMETIC IN CASES OF OBSTINATE CONSTIPATION. By THOMAS PUREFOY, M.D., Physician to the Fever Hospital and Dispensary, Cloughjordan, County Tipperary.—On November eve, 1850, a healthy farmer, aged 58, came in at a late hour to supper, after a day's hard work, and partook freely of frummenty, or boiled wheat, a little before going to bed. On the following morning he resumed his ploughing, but had not been long at labour when he felt a desire to relieve his bowels. The effort to do so was, however, incomplete, as he merely passed some grains of wheat and flatus, and returned to work with an unpleasant sense of fulness in the rectum. During the 1st and 2nd of November he was much distressed by frequent, painful and ineffective efforts to relieve the lower bowel; he had a distinct sensation of something solid and unyielding being impacted in the cavity of the intestine, forming a complete obstruction there, at the same time that it provoked the painful and fruitless efforts to unload the bowel already described. He was first visited on the morning of the 6th instant, at half-past 7 A.M., when he stated the facts just now detailed; he further complained of pain in the back, loins, and thighs, with a total inability to void either urine or fæces. The tongue and pulse were little altered from the healthy state; abdomen slightly tympanitic, but neither tender nor painful; the bladder had been emptied during the night, and he did not suffer from painful over-distention of it, nor could it be detected above the pubis.

An attempt was now made, with only partial success, to introduce a long flexible gum-elastic tube into the rectum; the instrument having been stopped at about seven inches above the anus. Tepid water was then thrown up, but not retained; but in its return it brought away a small quantity of soft and swollen wheat, whole and undigested, at the same time inducing a return of the painful, forcing efforts to unload the bowel.

During the day, three pills were administered, each containing one drop of croton oil, in combination with calomel and the

* Pathological Anatomy, p. 169.

compound colocynth pill; milder purgatives had been already tried in vain. At six o'clock in the evening the patient was frantic with pain; the bladder and rectum full of bursting; most distressing pain in the loins, hips, sacrum, and thighs, with occasional attacks of violent cramps in the lower extremities; pulse quick; tongue natural; abdomen tympanitic, but not tender; face pale, and expressive of much distress and suffering. No position afforded relief, and the poor sufferer writhed upon his bed or upon the floor, or walked wildly about his bed-room, screaming with pain, or crying piteously for relief. These very acute attacks of pain and suffering being paroxysmal, during a moment of comparative ease, or lesser suffering, the catheter was introduced, and a large quantity of urine drawn off; shortly afterwards, having rested for a few moments with the body bent forwards, and the face and chest resting upon the bed, an examination of the rectum was made with the finger, when a soft, tenacious mass was found to fill up the intestine completely, at a little distance above the sphincter ani. Another attempt was now made to throw up tepid water into the intestine by means of the tube and large syringe, with the view of dilating this part, and aiding the expulsive efforts by softening the contained mass. The fluid passed more freely, and when about a pint of water had entered the bowel, the straining and expulsive efforts were renewed with extreme violence. At this crisis, a compact mass or ball, of soft, swollen, glutinous wheat, was found to press strongly against the sphincter ani, but of such a size that the sphincter was thereby excited to contract violently, completely close the anus, and so prevent its expulsion. A scoop was now passed gently into the rectum, and by a continued rotatory motion made with this instrument, the "monster mass" was moulded and elongated into such a convenient form, that the violent efforts of the patient soon succeeded in expelling a large quantity of wheat, which had a very offensive smell, much resembling that of old barn, and evidently the result of a fermentative process commenced in the farinaceous mass, which had now been *in transitu* through the alimentary canal during a period of about six days and nights. Immediate and decided relief followed; the scoop was laid aside, and in half an hour another free discharge followed; it was produced by the natural efforts merely, and consisted altogether of wheat, mixed with a sour-smelling fluid resembling stale barn. The patient again refreshed himself in a tepid salt water bath, which he had used twice during the day, and from his bath returned to his bed, happy and thankful, where he enjoyed a quiet night's rest. It was remarkable, that, until the last twenty-four hours of his illness, this man suffered comparatively little pain, took some food, and slept occasionally.

The injurious effects of a large meal of indigestible food, taken at an unreasonable hour and under very unfavourable circumstances, were fully manifested in this case. The man had worked hard during the day, and fasted for several hours in the afternoon; then, just before going into bed, he ate heartily of boiled wheat. A long and heavy sleep followed, and on the next day the undigested food produced considerable intestinal irritation, with frequent urgent calls to empty the bowels. A small quantity of wheat was passed, per anum, quite whole and undigested; the lower bowel, at the same time, being so much irritated as to occasion distressing tenesmus. When the wheat ceased to be voided, the cause of irritation was over; tenesmus was no longer troublesome, and decided constipation followed, as undigested food accumulated in the colon. Some doses of purgative medicine were employed in vain, so that, when visited on the 6th instant, the patient was found to be suffering much from obstruction of the bowels, complicated with retention of urine. Remedial means were at once employed to overcome the obstruction, and effect the expulsion of the contents of the bowels; whilst it was hoped that the action of the purgative medicine might stimulate the bladder to contract and empty itself. After the lapse of about twelve hours it was found absolutely necessary to relieve the over-distended bladder, and also to devise some means for promoting the speedy evacuation of the bowels, more efficient than any that had hitherto been employed. The bladder having been emptied, the rectum, being examined by the finger, was found to be much distended by a large, soft, but very tenacious mass, which by its presence induced most painful, violent, but ineffective straining and expulsive efforts. This mass was occasionally forced down upon the sphincter ani, producing such violent contractions of this muscle as served completely to prevent its egress through the anal orifice. These violent expulsive efforts being opposed and counteracted by the antagonistic action of the sphincter, occasioned indescribable suffering to the patient. With a view to facilitate the expulsion of the contents of the rectum, by altering the form and lessening the bulk of this mass, and at the same time resisting

mechanically the spasmodic closure of the anus, a scoop was employed, as above described, and fortunately with the desired effect. The retention of the urine was a most troublesome and serious complication, and might, perhaps, have been occasioned by the pressure of the over-distended rectum upon the prostate gland and neck of the bladder; or possibly the sphincter muscles at the neck of the bladder, sympathetically took on a spasmodic contractile action, similar to that of the sphincter ani.

It was remarkable that this unwholesome food should have passed the pylorus and ileo-cæcal valve, and finally be retained in the colon, where it was evidently moulded into soft, tenacious balls, or rather masses, and had undergone a partial process of fermentation, before it was finally expelled.

Two Cases illustrative of the Effects of Tartar Emetic in obstinate Constipation of the Bowels.—A young man of active and industrious habits (being in good health at the time) became indisposed and feverish. He remained in bed, and used repeated doses of mild purgatives, but without the desired effect. The most active purgatives were subsequently given, but they proved wholly inefficacious. Fever, thirst, tumefaction, and tenderness of the abdomen set in, after the existence of constipation for about three days, during which period several active purgatives were judiciously employed, without any benefit whatever. Under these circumstances, the one-eighth of a grain of tartar emetic was administered in camphor mixture, at short intervals, so as to keep up a constant state of nausea. Its use having been continued for about twelve hours, the patient became much prostrated, and while in this state the bowels were freely moved. No unpleasant result whatever followed, and convalescence was quickly established.

Case 2.—A poor woman, aged 50, who had been for many years subject to obstinate constipation, accompanied by much pain, thirst, vomiting, and tympanitis, had a return of one of these attacks during the summer of 1850, to relieve which she employed a variety of active purgatives, but in vain. Croton oil was subsequently exhibited, and afterwards the tobacco enema, but without moving the bowels. At this juncture, tartar emetic was employed, as in the preceding case, and with the best effect, as the bowels were freely opened in a few hours. The patient was decidedly relieved, and for two days there were good hopes of her recovery; however, low fever, thirst, and diarrhoea set in, and in a few days terminated her existence.

The preceding cases afford satisfactory proofs of the efficacy of tartar emetic in removing obstinate constipation of the bowels, even where the most effective remedies usually employed in such cases have failed. Although the second case terminated fatally, yet the tartar emetic succeeded in removing the obstinate constipation which had existed for several days; and there is little doubt that death was the result of chronic disease of the bowels, aggravated and rendered acute by the occurrence of this last illness. Tartar emetic would appear to be a more manageable, and less dangerous remedy, in cases similar to those stated, than the tobacco infusion; and even where there is reason to apprehend the existence of chronic disease in the bowels, the cautious administration of tartar emetic, as here recommended, can scarcely be attended with any risk.—*Dublin Quarterly Journal*, February, 1851.

CLXXXV.—CASE OF TUMOUR IN THE MIDDLE AND ANTERIOR LOBES OF THE BRAIN. By WILLIAM TRAILL, Esq., Surgeon, Arbroath.—Mr. A. B., a farmer, aged 31, tall and robust, with an unusually small head, of active and temperate habits, but nervous and excitable, subject in boyhood to obstinate chronic ophthalmia, and since manhood to frequent attacks of dyspepsia, one of these terminating in jaundice,—in March, 1846, had an attack of inflammation of the hepatic peritoneum probably involving the duodenum, which yielded to general bleeding and other antiphlogistic measures, but left ever after a considerable degree of torpor of the bowels, requiring the habitual use of aperients.

On the 10th May of the same year, without any premonitory signs, he fell down insensible; on which I was sent for. When I arrived he had recovered, but was still torpid and confused, and had that peculiar expression of countenance which is commonly found after an attack of epilepsy; but I could not ascertain that there had been convulsions or foaming at the mouth, or the peculiar epileptic cry. A similar attack, I was informed next day, had occurred some hours after; but of this one I could not obtain any more particular account than of the first, his friends having been too much agitated to be capable of observing correctly.

In a few days he was able to be out and attend to his ordinary employment; and in the course of a few months he recovered his usual health and energy, except that ever after he was subject to frequent slight attacks of confusion or stupor, lasting only for a

few minutes, and attended with the appearance of sparks of fire before the eyes. With this exception, and a torpid state of the bowels, he continued in good health, and took a great deal of active exercise, both on foot, and, after the spring of 1848, on horseback, and had no real fits of epilepsy, till 26th May of that year, having been thus more than two years exempt from them.

On the day previous to that date he had been transacting some business at a distance from home, and, after staying over the night, left the place on horseback, with the intention of being in Arbroath by a certain hour. But on the journey his horse unfortunately lost a shoe, which accident mistimed and excited him a good deal, and induced him to ride very fast. When within four or five miles of Arbroath, he had taken a fit on horseback, and was found lying on the road, but not hurt. He afterwards mounted his horse, and rode into town, transacted some business, and the called on me. This fit was evidently owing to the violent exercise and mental excitement. From this period till March 1850, he continued to have fits at intervals of from one to six months. On one occasion he had three in one day. All the seizures since 26th May, 1848, were undoubtedly epileptic. Latterly, a rash over the forehead appeared after each, and extravasation on both sclerotics after several. During the intervals of these attacks, although in good general health, and able to take a great deal of exercise without fatigue, he continued subject to daily attacks of slight stupor, and was generally nervous, excited, anxious, and unable to bear much mental exertion, although the mind was commonly clear, and the bodily functions natural. The pulse was frequent, but otherwise natural.

There did not appear to be any adequate cause to which the first attack could be attributed. Betwixt thirteen and fourteen years before, he had sustained a severe contusion on the head, from a beam of wood falling upon it; but this did not seem to produce any serious inconvenience at the time, although his friends say he had been subject ever since to occasional severe headaches. There did not appear to be any epilepsy in the family; but his father died, after suffering for many years from some nervous complaint, which greatly affected his spirits, rendering him incapable of mixing with society. His mother died of an affection of the spinal cord, slow in its progress, and producing general paralysis. A sister, who had been long in delicate health from a chest affection, died of erysipelas. These three deaths, as well as that of his grandmother (a woman beyond ninety), all occurred within two years, and greatly unhinged him; for he had lived with them in family from his infancy, and was warmly attached to them. The treatment employed hitherto had been local bleeding, blistering, cold applications, aperients, spare diet, and abstinence from all stimulants, exercise in the open air, which he always enjoyed and bore well, and the careful avoidance of inordinate mental excitement and exertion. A caustic issue was kept open in the nape, and full courses of the metallic tonics—zinc, copper, and silver—employed, with regular cold sponging every morning. These means, till the unfortunate occurrence in May 1848, promised to be attended with permanent success.

In February, 1849, he went to Edinburgh, for the purpose of consulting Professor Christison, who advised perseverance for another month in the use of ammoniuret of copper—the tonic he was then using—a month's excursion, and separation from business, and, if no amendment, a cautious trial of arsenic, continuing its use till its physiological action should begin to appear, at the same time giving the volatile tincture of valerian;—a trial of extract of nux vomica, or of strychnia, was also proposed, if the disease should not yield to the other means. These suggestions were acted upon till February, 1850, but without any satisfactory result. Dr. C. was, therefore, again consulted. His opinion had been, from the first, that there was organic disease within the head. As the patient continued to be well nourished and muscular, he proposed the trial of a system of very low diet.

It was some time before I could persuade his relations to allow him to be subjected to this severe plan of treatment; but in the course of a month, convinced of the hopelessness of the case, they were brought to give their full consent to a trial of it.

Having first withdrawn blood pretty freely from a vein, his diet was gradually reduced till he was allowed only three ounces of animal food and six ounces of bread daily, or their equivalents. Tartar emetic and digitalis were also used as auxiliaries. He never had an epileptic fit after this, and for three or four months enjoyed better health, both of body and mind, than he had done for a considerable time previously; but afterwards he became gradually feeble and languid, so that it was necessary to make some improvement in his diet; and he fell into a most distressing state of hypochondriasis and nervous irritability, which continued

till within the last few days of his life, when he gradually fell into a state of complete coma, and died on the 20th December.

The head was examined by me two days after death, along with my brother, Mr. John Traill, who also saw him frequently during his illness; and the following were the appearances noted:—Membranes natural, but strongly adherent to the bones; veins rather enlarged, and containing dark fluid blood; slight serous effusion between the arachnoid and pia mater; substance of the brain healthy, but rather pale; nearly in the centre, and towards the lower part of the left hemisphere, a tumour fully the size of a walnut, of an oval form, of a dark pinkish colour, and of somewhat firmer consistence than the brain, in its centre partially softened and broken down, and mixed with purulent matter; in the lower and anterior part of the same hemisphere, another similar tumour, about the size of a large hazel-nut, of like structure, but without softening—both completely circumscribed, and the portions of brain with which they were in contact appearing entirely of their natural structure. The ventricles contained about an ounce of limpid serum. The pituitary gland enlarged, and of a dark colour, and that portion of the dura mater which covers it, and lines the sella turcica, preternaturally vascular, and of a livid colour. The bone which forms the sella turcica also dark coloured, and on the left side its process partially absorbed.

The other contents of the cranium appeared to be in a normal and healthy state.—*Edinburgh Monthly Journal*, March, 1851.

CLXXXVI.—CASES OF LABOUR, COMPLICATED WITH ULCERATING CANCER OF THE WOMB: WITH REMARKS. By HENRY OLDHAM, M.D., Obstetric Physician to, and Lecturer on Midwifery, &c., at Guy's Hospital.—*Case I. Ulcerating Carcinoma of Cervix Uteri during Pregnancy—Breech Presentation—Rupture of Uterus.*—On the 17th of June, 1847, Mrs. H., a poor woman, with a pale and anxious face, called at my house for advice. She was 33 years of age; had been married eight years, and was the mother of four children, whom she had carried well, and given birth to without difficulty or accident. She had suckled the last child for fourteen months; and, before weaning it, had again become pregnant, and was now seven months advanced in gestation.

The principal symptom of which she complained, was a frequent coloured discharge, which first came on a month after she was pregnant, and had continued, with but short intermissions, to the present time. It was now brought on by any exertion, or by straining to relieve the bowels. Four days since she had had an attack of bleeding, which came on like a menstrual period, the discharge being of a vivid red colour. It lasted in this way for two days, and was succeeded by a profuse watery discharge, of a faint, but not very offensive smell. She was restless at night, feeble and low-spirited in doing the work of her family in the day, and she occasionally had a burning pain at the lower part of the abdomen and back; but the degree of pain which she suffered was far less than is usual with the same disease in the unimpregnated state. The child moved freely.

On making an examination, I found the cervix the seat of malignant disease, which had already destroyed a considerable portion of both lips of the os uteri, leaving a circular hole large enough to admit the tips of two fingers, with which the presenting part of the child could be felt through the membranes. The tissue of the cervix, around the os uteri, was thick, hard, and uneven; and a hardened, well-defined bar of solid matter could be felt on the anterior segment of the womb. The appreciable limit of the disease in this direction seemed to correspond to the os uteri internum. The finger could not reach sufficiently far posteriorly to ascertain the extent of tissue which had there become implicated; but, as far as could be felt, it was unusually hard and rigid. The examination caused some bleeding.

Mr. Wells, a gentleman in practice in the neighbourhood, from motives of humanity, and from interest in the case, undertook to attend her in her confinement. In consulting with him, it was agreed that she should be allowed to go on her full time, and that the manner of delivery should be determined by existing circumstances. She was to live as well as she was able, and to take some tonic medicine, and an opiate occasionally at night.

On the 31st July, I was requested to see Mrs. H., who was reported to have been in labour for some hours: but, on visiting her, I found her to be suffering from an aggravated degree of false pains, mixed with much pain that was connected with her disease. On examination, I found that the disease had made progress in the cervix, which was lower in the pelvis, and more open. The extent of surface which was affected seemed considerable, including the whole interior of the canal of the cervix, which felt of a stony hardness, and broken up into a rough, deeply rutted,

bleeding tissue. Having stretched my finger through this seemingly lengthened passage, I could feel the presenting part of the fetus, which appeared to me to be the breech. An opiate was given, which produced some hours' rest, and much refreshed the patient.

On the night of the 3rd of August, Mr. Wells sent me word that Mrs. H. was in labour, and that the breech presented. On seeing her, I found that, under the influence of regular pains, the cervix had yielded somewhat, the os uteri being more open, and more dilatable; and the breech of the child was easily felt. The front wall of the cervix, however, was indurated, thick and unyielding, like a mass of hardened mortar. The bladder was distended with urine, which was drawn off, to the amount of a pint and a half, with the catheter. She had vomited occasionally since labour had set in: her pulse was rapid and feeble; and her countenance had the sharp, pallid, anxious look so characteristic of an advanced cancer. The dilatation of the os uteri was not sufficiently advanced to allow of any interference, and I agreed to meet Mr. Wells again in a few hours; during which time he watched for any opportunity which might offer to help delivery.

At 7 A.M., on August 4th, I received a note from Mr. Wells, telling me that the poor woman had suddenly become collapsed, and was dying. Before I could reach her house, she had been dead about twenty minutes. Since I saw her, labour has gone on, with some effect on the dilatation of the os; but she had been vomiting, and had then become deathly faint, and moribund.

Post-mortem Examination. This was made on the same night, the weather being extremely hot. We found that already some marks of decomposition were visible on the body. On opening the abdomen, some bloody fluid, composed of liquor amnii and blood, ran out. The uterus was distended with gas; and on drawing it forward, the fetus (a full-grown male) was found projecting half through a longitudinal rent, about five inches in length, in its back wall, beginning at the cervix and extending upwards on the body. The fetus, uterus, and adjacent abdominal viscera, were all in a state of incipient putrefaction. The uterus and its appendages were removed, and taken to Guy's Hospital. The placenta, from the rapid progress of decomposition, separated from the uterus. The abdominal viscera were very cursorily examined, as the room was dimly lighted, and we were mainly intent on getting away the uterus; but, as far as we ascertained, they were free from disease.

The size of the uterus, and thickness of its walls, were natural. The whole inner surface of the cervix was thinned by malignant disease; and the structure was deeply furrowed and hard. The upper boundary of the disease, marking the inner opening of the cervix, was very clearly defined by an edge of healthy tissue belonging to the internal part of the body of the uterus, which was altogether free from malignant disease. The vagina also was healthy. On the posterior surface of the uterus, on the left side, was a small superficial patch of malignant deposit; and, spreading from it to the ovary and tube of the same side, were numerous bands of false membranes. The right ovary, too, had been enveloped in a web of false membranes. There was a corpus luteum in the left ovary.

Case II. Carcinoma of Cervix Uteri—Pregnancy—Delivery by Craniotomy.—In 1848, a poor woman, nearly 40 years of age, became an out-patient, under my care, at Guy's Hospital, for hard cancer of the cervix uteri, with occasional hæmorrhage, and a constant fetid watery discharge. She had had syphilis some years before, and had lived a hard and destitute life. Her general health improved under the influence of tonic medicines, with some astringent and sedative wash to the uterus. I then lost sight of her.

About a year from this time, on May 7, 1849, Mr. Leadham, of Tooley-street, sent me word that this patient was in labour; and finding a great obstacle to delivery, and thinking that I should be interested in the case, he asked me to see her. I found that she had been in strong labour for some hours, and was getting weak and exhausted, but that the os uteri was prevented from dilatation by a mass of ulcerating cancer in the cervix, from whence a fetid discharge was oozing away, which had inflamed and excoriated the external organs. At the time, I thought that the malignant disease had not gone on so rapidly during her pregnancy as I should have expected; but the extent of the cervix-tissue which had become infiltrated was considerable, and offered a formidable obstacle to delivery. The head was presenting, and could be felt through the disc of the os uteri, which, during labour, had become dilated to the size of a crown-piece.

To deliver her as soon as possible was imperative. I perforated the head, and freely emptied its contents; and, under the influence of uterine action, the bones collapsed well. I fixed the crotchet firmly on the inside of the presenting parietal bone,

rather posteriorly; and being able to make powerful traction in this direction (which was the best for the head to pass in small compass) I had the satisfaction of finding it clear the hard narrow passage of the cervix with but little laceration of its structure. The placenta was strongly adherent, and was obliged to be peeled off with the hand.

I have since been informed by Mr. Leadham, that the woman lived about a month. On inspection after death, the cervix was found to be the seat of malignant ulceration; and on the posterior wall of the vagina, close to the cervix, were some ulcerated patches which had perforated the walls of the vagina, and communicated with the pelvic peritoneum. Peritonitis, of a low form, had supervened, and there was some purulent effusion in the peritoneum. There was a small cyst, of the size of a chestnut, in the right ovary.

Case III. Cancer of the Uterus and Vagina—Death of Fœtus in Utero—Easy birth—Perforation of Vagina.—I saw Mrs. P., a poor woman, 42 years of age, on the 26th July, 1850. She had been married twenty-three years, and had had twelve children. She had been confined six weeks. When one month gone in her last pregnancy, she began to have watery discharges with bleeding, and suffered severe pain in the loins, hips and legs, so that sometimes she could neither sit down nor move about. Sexual coitus brought on bleeding, and was forbidden. She suffered much from constipation. When these symptoms first appeared, she sought advice from an experienced medical man, who told her that she had cancer of the womb; but, at different times during her pregnancy, assured her she was not pregnant, although her own confidence in the fact of her pregnancy remained unshaken. She was suddenly seized with labour pains on June 9th, 1850, after she had gone her full time, according to her reckoning, and was easily delivered of a dead male child. The placenta was expelled without difficulty; but both the child and the secundines were putrid. Since this time, she had been getting worse; the discharges of blood and fetid watery discharge had been mixed with feculent matter. She was cachectic, and greatly exhausted, and a constant sufferer from cancer pains.

On examination, the cervix uteri, and the posterior wall of the vagina, were found extensively destroyed by ulcerating carcinoma; and there was an opening into the rectum, through which the feces passed. The disease was in an advanced stage; and her feeble constitutional power seemed unlikely to hold out long against the exhaustion produced by it.

Remarks.—The preceding cases are instances of an extremely rare complication of pregnancy and labour, and one which, when viewed in relation to delivery, is of practical importance. They were all three cases of carcinoma of the cervix in a state of ulceration, and not of the fungoid or softer form of malignant disease. Neither are they to be associated with what has been termed the scirrhus os uteri in an early stage, by which is meant, either entirely or partially, a hard, somewhat large, and nodulated cervix, but without ulceration. This morbid condition, so common in the unimpregnated state as the result of chronic inflammation, may also exist in pregnancy, although it usually becomes softened as gestation advances, by the accumulation of the mucous secretion of the glands of the cervix, and the large supply of blood, and offers but little impediment to labour. Cases of this kind have been classed as cases of cancer with pregnancy, but without any conclusive proof of their being really cancerous. Here and there, as very rare exceptions, such cases may retain their induration and indisposition to dilate during labour. There is a preparation in the Museum at Guy's Hospital, where a large flap of the lower segment of the uterus was separated after a long first stage of labour; but there is nothing in the swollen and indurated cervix to indicate malignant deposit. I doubt very much whether any one, who has so thoroughly investigated the subject as to know when he has failed as well as when he was right, would have any confidence, from a physical examination of the cervix, in pronouncing a disease to be carcinoma before it had begun to break down. Directly this process begins, it may be detected by a kind of brittleness of the edge of the os, or inner surface of the cervix, on a hard base, which is very characteristic of the commencing work of destruction. But there is nothing in the touch of the antecedent "scirrhus" to distinguish a benign and curable from a cancerous and incurable induration.

In Case III, the posterior wall of the vagina was implicated in the disease; but in the other two it was confined to the cervix, converting this part of the uterus, towards the end of pregnancy, into a rugged indurated channel, involving a large amount of structure, and offering a solid unyielding obstacle to the progress of uterine dilatation.

The possibility of impregnation occurring in cases of incipient,

or even open cancer of the cervix, notwithstanding the bleeding and watery discharge, is authenticated by several recorded cases,* and confirmed by the present instances. And however improbable such a concurrence may be, yet it is an important point in practice to give due weight to any signs or suspicion of pregnancy, to note them, and to carefully investigate them, with the view of deciding this question. In the third case, in spite of the woman's own assurance of being pregnant, this precaution was omitted. In the number of cases of cancer of the neck of the womb which come before me, especially in hospital practice, I have been struck with the comparative frequency of sexual intercourse between husband and wife, when it would be thought that the fetid discharge and bleeding would have secured its voluntary suspension. The effect of the discharges on the glans penis in these cases, with but rare exceptions, is not irritating; and the possibility of pregnancy, during the child-bearing age, independently of the injury to the woman when the cancer is ulcerating, ought to warn the practitioner to take care that sexual connexion be forbidden.

When pregnancy is known to be present, and the fact of a pre-existing cancer has not been ascertained, it is possible that the signs of the development of the disease may be confounded with some of the morbid states of pregnancy; and the palliative measures may be alone prescribed. In the first case, no vaginal examination had been made before the woman applied to me at the seventh month, although she had been previously under medical care, and no suspicion of so serious a disease had been entertained. It is always desirable to examine the uterus *per vaginam*, and to ascertain the condition of the cervix, if bleeding comes on frequently during pregnancy, although it may not amount to a profuse flow at any time; especially if it be brought on after walking or straining, or during the sexual act, and if it be followed by a watery, or thin purulent discharge, with a more or less fetid odour. Symptoms like these would warrant a strong suspicion of malignant disease; but, until the parts are examined, no certainty can be arrived at. It has happened to me to entertain this suspicion, when the case has turned out to be one of a few warts within the labia, whose fetid secretion has, from neglect of cleanliness, collected about the parts; and the occasional small bleedings have come from a neglected ulceration of the cervix, whose vascularity has increased with pregnancy. A more common case is met with, especially in hospital practice, which, in its symptoms in connexion with early pregnancy, more closely resembles cancer. I mean induration of the cervix, with a granular suppurating surface within its channel, the result of chronic syphilis. This may, or may not be associated with thickening of the cellular tissue of the labia and cedematous effusion, with fissures and excoriations about the external organs. When pregnancy occurs under these circumstances, there is occasional bleeding from the surface of the cervix, a thin, ichorous, acrimonious, and offensive discharge, and the aspect of the patient is akin to the malignant cachexy. I have felt the cervix in a case of this kind, and have doubted at first whether the disease were malignant. This is one of the cases in which the induration may sometimes last to the end of pregnancy, and oppose the dilatation of the os. The diagnosis of syphilis is to be formed from the previous history, and other existing indications of it in the integument, periosteum, &c. The progress of the disorders, during pregnancy, is different. The morbid conditions of the cervix, in the venereal state, do not become materially aggravated; but, on the contrary, the induration may become partially, or, I believe, even altogether effaced under the physiological softening of the cervix. Such a case is more like cancer at the beginning than at the end of gestation. True carcinoma of the cervix, although in some cases it appears to have been rather tardily developed, generally, as in the first case here recorded, rapidly progresses, destroying the inner surface of the cervix, and infiltrating and hardening the deeper and adjacent parts. When examined by the finger in an advanced state, there cannot well be any mistake about it. The circle of the os is more open than in normal pregnancy, from the positive loss of substance; while its edge, and the whole inner surface of the cervix, is rutted and indurated, with a surface which bleeds and breaks down under the touch of the finger; which, on being removed from the vagina, brings with it some of the fetid discharge. If the finger be not introduced within the cervix, and the outer or vaginal surface of the cervix be not yet destroyed, this part of the lower segment of the uterus feels like a solid uneven tumour, which is interposed between the finger and the presenting part of the child. If there have been much bleeding, or a sudden hæmorrhage towards the end of pregnancy, and a clot have formed within the cervix, the malignant disease not having previously been known,

the physical conditions may, when first felt, resemble placenta prævia; especially if the disease be of a fungoid character. If the finger, however, be passed *within* the cervix, so as to displace or go beyond the clot, the solid uneven surface of the cancerous mass will be perceptible.

The prognosis in cases of carcinomatous degeneration with pregnancy is most unfavourable to both mother and child. The mother may die from the exhausting effects of cancer—viz., hæmorrhage, copious watery discharge, vomiting, &c., before labour sets in. She may die undelivered, from ruptured uterus, or of exhaustion from protracted labour. Or, if she survive the immediate perils of delivery, she may sink exhausted a few hours or a day or two afterwards. If this does not happen, the disease generally goes on more rapidly, perhaps rendered less tolerable from some injury to the soft parts by the delivery, and ends in a few weeks, or possibly a few months, in death.

The death of the child is very common. It frequently happens (in about a third of the cases) that premature labour, between the sixth and seventh month, spontaneously ensues, the child sometimes having lain dead and putrid in the uterus, and then easily escaping during labour, as in Case III; this is certainly the most favourable termination for the mother. In other cases it is necessary to destroy it to effect delivery; or it may die in the course of delivery, as in Case I. I know of no facts to show whether the few who are born alive, and live, inherit the taint of cancer; but assuredly such a child would need the breast-milk of a healthy wet-nurse, and the same hygienic care and solicitude in its rearing which are given to serofulous children.

Treatment.—Some cases are recorded in which parturition at term has been accomplished by the natural powers, the mother surviving the act,* and the child being born alive. But so favourable a termination of labour, however it may be hoped for, is hardly to be expected. Death of the fœtus at the sixth or seventh month, its retention and putrefaction in the uterus, and its comparatively easy birth, have already been alluded to, and may be reckoned upon as probable events.

Our principal resources in the management of such cases are the artificial induction of premature labour, lessening the child's head, dividing the diseased structures, and the Cæsarian section.

Dr. Robert Lee's opinion, with reference to the first of these operations, is very decided. "If abortion," says he;† "does not take place where pregnancy exists with cancer of the os uteri in an advanced stage, the membranes of the ovum should be perforated if possible, and at the seventh and half month if the disease is less extensive." When I saw the subject of the first case which has been related, at the seventh month of her pregnancy, I considered the propriety of puncturing the membranes; but I determined against it. There would not have been the difficulty and even danger in doing so, which in some cases must be encountered in order to perform it, and which, I apprehend, might be sufficient to deter the practitioner from undertaking it. If the cervix were blocked up by cancerous disease, which must be passed through or broken down in order to reach the membranes, causing thereby serious hæmorrhage, then this operation ought to be avoided. But the membranes in my case could be touched, and might have been easily perforated. It appeared to me, however, that pregnancy, instead of aggravating the suffering of the patient, had rather lessened it, and I thought it something to gain two more months of life and comparative relief in a disease which could not but end fatally in a short time. The extent of disease at this time would, in my judgment, have been a most serious obstacle to the passage of a seven months' child, which would have probably needed instrumental assistance for its delivery, and the exposure of the diseased structures to the chance of laceration, and of the mother to the utmost peril. I could see nothing in the delivery of a seven months' child, which could so exempt the woman from danger as to counterbalance the positive benefit of a prospective life of two months to her. I therefore preferred to meet whatever increased difficulty might arise from a large child when labour came on, to bringing on, by my own act, a crisis which was full of peril. I doubt the prudence of inducing premature labour in these cases as a rule. On the contrary, the rule with me would be, to leave the whole care of pregnancy and the time of labour to nature, and to do all that I could to alleviate suffering and urgent symptoms, and to preserve to the parent as much as possible of the nine months of gestation, which forms no inconsiderable part of the duration of a case of cancer.

When labour sets in, we must be guided in our choice of the method of delivery by circumstances. It is desirable not to interfere, as long as the patient's powers and the strength of uterine

* See Dr. Robert Lee's Clinical Midwifery. Second Edition, p. 90.

* Lever (Dr. J. C. W.) Case in Guy's Hospital Reports, April, 1842.

† Lee (Dr. Robert). Clinical Midwifery. Second Edition, p. 94.

action are well sustained in the efforts to dilate the os. It may happen, that suddenly the diseased mass will give way, and the lower portion of the uterus be either rent or detached, and carried before the head in its sudden escape into the vagina. But if the vital powers, already enfeebled by the drain from the diseased part, begin to fail, and the os uteri be still insuperably rigid and undilated, it has been recommended to make incisions through the obstructing portion, with the hope of giving room for the passage of the fetus. In the two cases above related, this procedure appeared to be quite impracticable. The whole circle of the cervix was so implicated in the disease, and the indurated matter was so deep and massive, that there was no edge to cut, and an incision would have merely inflicted a wound upon the diseased strictures and have caused them to bleed, without opening a way for the escape of the child. Any surgical operation of this kind, to be effectual at all, would require the cutting out of a mass of the cancer, which would be hazardous in the extreme, and indeed impracticable. Incisions through the cervix are only available for the purposes of delivery in those extremely rare cases when the cervix-tissue is hard and unyielding, but not from cancer (unless in a very early stage), and does not open under the forces of labour, which may have been spent upon it until the cervix is inflamed, and the female well nigh exhausted. The os may then be dilated by the knife, and the operation is well-defined, easy of accomplishment, and, as far as it has been performed, effectual in its purpose.

Abandoning therefore the idea of incision in these cases, there is the alternative between craniotomy and the Cæsarean section. The second case terminated as favourably by the first operation as could have been expected, but still it ended with the birth of a mutilated child, and the death of the mother one month afterwards. Had the disease made a little more progress, had it been as great as in the first case, the woman, in all probability, would have died undelivered, so difficult would it have been to remove the child by the crotchet, with the feeble endurance of the patient. I cannot but think, that the immediate risk of death to the mother, when the disease is much advanced, setting aside all consideration of the child, is as great in delivering by craniotomy as the Cæsarean section; and on the score of suffering, the latter is certainly the most favourable. When, however, after a careful study of the case, there is a prospect of delivering through the natural passages (as in Case II), although it be discouraging, and, at the best, must be attended with great risk, yet it is desirable to give the preference to it. But if the patient's powers seem quite unequal to sustain the shock and suffering of a protracted delivery through strictures which will bleed and lacerate, and if the *fœtal heart is heard to beat*, I think that the Cæsarean section offers a speedy and a certain delivery, with no greater hazard, imminent though it be, and at the same time may rescue the child. The preservation of a child's life, under circumstances of hopeless disease of the mother, ought to turn the balance, in the consideration of the means employed, in its favour. In such cases, auscultation of the abdomen, to hear the fœtal heart, on which alone we can safely rely for the fetus being alive, ought to be attended to. This ought to be ascertained in any case so complicated, during that part of labour which is entrusted to the natural powers, because the sudden death of the mother from rupture of the uterus, as in Case I, or from sudden and rapid exhaustion, may require the abdomen and uterus to be opened to save the child. A want of preparation, and an uncertainty as to the life of the child, may just let the moment slip by in which the child might be preserved. The moderate inhalation of chloroform, in cases of this kind, would be most desirable; but the friends of the patient ought to be clearly apprised of the chance of sudden death from the disease itself, so that, should it happen, it may not be ascribed to the chloroform.—*London Journal of Medicine*, March 1851.

CLXXXVII.—CASE OF HYDROPHOBIA. By J. WILSON, JUN., M.D.—I have thought that the following case, which occurred in my practice near Holmesburg, Pa., in 1840, should be reported, not because it is expected to throw much light upon the pathology, or lead to a more successful plan of treatment, but as it adds something to our statistics of this terrific disease. I have delayed the report so long, because I thought it desirable to wait and see whether any bad consequences were to result to the other individuals bitten by the dog which inflicted the wound in this case. The following account of the symptoms and of the treatment pursued is transcribed, with but little alteration, from notes made during the progress of the disease.

Charles Baker, aged 20, sanguine temperament, small but robust, and of active habits, having been usually engaged in the laborious occupation of a farmer—came to visit his friends on (Sunday) May 24th, 1840, and amused himself in teasing a little

dog—by pinching its tail and other means of annoyance—till the little enraged animal accidentally (?) caught his thumb—whether right or left could not be determined. The sport ceased, the thumb was wrapped up, and soon healed; he went about his business, and no more was thought of the matter till June 17th, two days after hydrophobic symptoms had occurred, when I received the above account.

He returned on Monday, June 15th—three weeks after the accident, said he was unwell, and felt weak, but made no more particular complaint; asked for some water, and when it was offered to him, pushed it away, saying he could not drink it. He was offered some jelly, but could not eat it. On Tuesday, he tried to drink once in the course of the day, but the attempt created so much pain that he relinquished it.

June 16th. Tuesday evening.—At the time of my first visit, he was dull, stupid, and disinclined to say anything; answered questions by monosyllables, though quite rationally; said he had no pain; felt weak and uncomfortable; complained of oppression as if from a heavy weight upon his chest; respiration natural, except that he could not make a very full inspiration; eyes a little red; pulse 70, rather full, natural—attributed his disease to drinking too much iced lemonade on Sunday. There was so little appearance of disease that I should have thought it all pretence, but for the difficulty of suggesting a motive. He was offered some water, when the following phenomena ensued:—anxious respiration, quick and convulsive; a corresponding convulsive movement of the hand in which he held the cup; general trembling and anxiety; compressed nostrils. He succeeded in about half a minute in throwing it into his mouth (as if by an act of desperation) and swallowing a little; when he hurriedly lay down and composed himself. He was afterwards offered a piece of dry bread, which he ate without apparent inconvenience. I felt assured of the presence of this awful malady; and, from the fatal termination of every case of which I had either heard or read, of the utter hopelessness of the case. (Directed a teaspoonful of laudanum, to be repeated in an hour if necessary. Hydrag. chlorid. mitis gr. xx.)

17th. He was tolerably quiet all night, but did not sleep; still talks rationally; thirst increased; increased dread of water; convulsive movements about the throat, with anxious respiration on the least excitement, as the opening or shutting of the door, a current of air, the admission of a little more light than usual, or the approach of a stranger to his bed; pulse not much altered; no alvine evacuation for three days. (Calomel gr. x; camobogæ gr. j; morphæ sulph. gr. ss. every hour till he sleeps or becomes easier. Epispastic to the nucha.) He became more quiet after the second dose of morphia. The cathartic operated well. The blister was fully raised in about five hours from the time of its application. The medicine was administered by sprinkling it upon a piece of bread.

7 o'clock P.M.—He swallowed about fʒi of water, with considerable exertion; took the sulphate of morphia seven times in the course of the day; it is said he showed a disposition to bite. (Blister to be dressed with ungt. hydrargyri; morphæ sulph. gr. j, to be sprinkled on the blistered surface; mercurial frictions; morphia to be increased gr. j every hour, watching its effects.)

18th. 6 o'clock A.M.—He was restless all night, profuse perspiration; pulse full, bounding, not very rapid; drinks better.

12 o'clock M.—Swallows fluid better; pulse thready; precordial oppression excessive; some pain in the right arm, which he supposed to arise from having been bruised by a horse (perhaps he was bitten in the right thumb). (Blister to the epigastrium; small blisters on the right thumb; calomel gr. xv. to be repeated in two hours, unless the first dose produce an evacuation.)

8 o'clock P.M.—He swallowed some water naturally this afternoon; appeared much more calm and comfortable; slept about half an hour between two and three o'clock this afternoon; has taken gr. xiv. sulph. of morphia since last evening. (Calomel gr. xv., to produce an evacuation.)

19th. Paroxysms are rather more violent; there has been no alvine evacuation since the 17th; he attempted to bite last night; appears to be perfectly harmless; swallows water as well as he did yesterday morning; is more delirious. (Continue the morphia; extr. aconiti gr. ss. every two hours; a cathartic enema.)

20th. He is more delirious; hardly recognizes any one; swallows tolerably well; moderate pyralism; mercurial fetor and slight ulcerations about the roots of the teeth; pulse not so full as yesterday; skin cool and moist; no evacuation since the operation of the enema. There is no appearance of approaching dissolution. (Morphia sulph. gr. j every two hours, alternating with extract. aconiti, gr. ss; calomel, gr. x.)

Evening.—He was quite delirious—weak—pulse fluttering, occasionally intermitting. The secretion from the mouth (or fauces) was viscid and dark-coloured, having the appearance of a more consistent dark substance diffused through a pearl-coloured liquid. He propelled it to a considerable distance as he lay on his back; it sometimes passed a yard beyond the foot of his bed. There was a peculiar motion about the throat just before he discharged his sputa; somewhat like that produced by the attempt to swallow water; his features were mostly in motion; there was a peculiar motion about the mouth; risus sardonius occasionally for a few moments at a time; eyes red and glassy; oppression of the stomach. Difficult respiration, irregular, and sometimes intermittent. He would omit to breathe for the time occupied by one, two or three respirations, and then respire rather quickly (pant) for a few minutes. He became less manageable in the course of the evening; was restrained by fastening a sheet loosely across the bed; as soon as he discovered this contrivance (three or four hours before his death), he became outrageous, and continued unmanageable till death terminated his sufferings at 3 o'clock on Sunday morning, June 21st, 1840, twenty-seven days after he was bitten, six days after the appearance of the first symptoms, and four days after he was first subjected to medical treatment.

The difficulty of swallowing liquids was a prominent symptom throughout; it was greater on Wednesday (the next morning after I first saw him) than at any other time; on Thursday afternoon he drank half a teacupful without much trouble; his thirst continued and he took more or less water every day, and occasionally without much pain.

Continued restlessness was present throughout; he slept more during the whole week before his death, except about half an hour on the 18th.

Thursday, he was mostly somewhat delirious, especially during the last day, but was perfectly rational when spoken to, or when he had something to fix his attention; and what is remarkable, had not the least conception of the cause of his disease, but continued to blame the cold lemonade.

He ate nothing of any account throughout the whole course of his disease, except the bread on which his medicine was administered.

He complained of no particular pain, except headache, once or twice, and a little pain in his right arm which he had been hurt by a horse. But he continually cried "Oh! oh! oh!" which, with his anxious countenance, tumbling and tossing, presented an appearance of suffering of which no description could afford any adequate conception.

The symptoms in this case seemed to differ from those of tetanus which I have seen, principally in the total absence of anything like the tonic rigidity of muscles observed in tetanus; the character of the convulsive movements, which presented more the appearance of tremors than convulsions; the greater irritability and intolerance of light; the power of any trifling exciting cause to produce a paroxysm.

There was but little susceptibility to the action of *narcotics*. Tuesday night he took two teaspoonfuls of laudanum, without any appreciable effect. On (Wednesday) 17th, he was directed gr. ss. morphiae sulph. every hour till he became easier, which occurred soon after he took the second dose. In three hours he was as bad as ever, and began to take it again. At night the dose was doubled and continued, with the effect of producing some drowsiness and a short nap on Thursday; more ease and an ability to drink without so much trouble. The medicine was continued at this rate as nearly as could well be accomplished, with attendants who were very much afraid to trust themselves in his way; indeed, there was a difficulty of administering any medicine throughout the course of the disease with proper regularity, except when I was present to attend to the matter myself. Some extract of aconite was prescribed during the last day, but it was not administered with any degree of regularity on account of the rapidly increasing delirium. I was induced to use the large doses of sulphate of morphia in this case from having observed its beneficial effects in two cases of traumatic tetanus, which terminated favourably, in which it was used in very large doses, almost to the exclusion of other remedies, and in one of which the water dread was quite as great as in this case. If it should ever be my fortune, or misfortune, to treat another case of this disease, the salts of morphia would be liberally administered, since we are not acquainted with a more active or more certain medicine of its class. Two remissions of the disease seemed evidently to depend upon it; the aconite would probably be omitted, as the delirium increased very much soon after it was administered, and continued constantly till death terminated the case. This, however, is partly if not wholly to be attributed to the progress of the disease

and the omission of the morphia on the alternate hour. Its uncertain strength is another serious objection to the use of aconite in a disease which requires large doses and promptly administered.

Cathartics operated well, considering that there was so much laudanum administered at the same time; indeed, much better than could have been expected in a disease so seriously involving the functions of the whole nervous system. I should not much wonder if the alimentary canal were yet discovered to be the best surface for the application of our counter-irritants in this disease.

Blisters drew very promptly. One placed on the nape of the neck was fully raised in five hours from the time of its application; and another placed on the epigastrium acted quite as promptly.

He was evidently salivated on Saturday the 20th. The mercurial factor was very evident, with slight ulcerations about the roots of the teeth. The blisters had been dressed with mercurial ointment, and frictions employed to the arms and thighs; he had likewise taken several large doses of calomel with a view to its cathartic effect.

Blood-letting was not employed in this case, although it is so universally recommended and as universally practised, as if it is ever to do any good in these cases it should have been made to appear in some of the numerous instances in which it has been tried. I am not, however, disposed to find fault with it while I have nothing better to offer.

The dog which inflicted the wound in this case appeared more irritable than usual the day before, as appeared from his biting the cat, refusing his food, &c. He bit two individuals, a man and a boy—they were both fond of the same kind of amusement—the one on the hand, the other on the bare foot; the next day after, he bit Baker. He escaped within an hour or two afterwards, and has not been heard from since. This occurred May 25th, 1840.

Neither of the individuals bitten has as yet suffered any inconvenience except a little fright. As neither of these was alarmed till after unequivocal symptoms of the disease were present in the first case, I advised them to do nothing, that there were not more than one in twenty of those bitten by rabid animals who suffered in consequence, and that as one had already suffered, we should probably hear of nineteen others being bitten before another would suffer from the disease; that in fact their danger was inconceivable; that I knew of no remedy likely to be of any use, except as it might tend to allay their anxiety; that they might as well go to Mrs. — (of whom they spoke as professing to have a certain remedy), or any other old woman, and take her medicine, as they would almost certainly add two to the well-authenticated cases of the successful use of her prophylactics. This was the course pursued; the old lady assured them that they need not fear after taking her medicine: her prescriptions were faithfully attended to, and so far with perfect success. They gradually ceased to be alarmed, and in the course of a few weeks, after the excitement in the neighbourhood had ceased, appeared to have no more anxiety about the matter. The remedy which they used appeared to be the root of the elecampane, &c., according to the formula given in *Rees's Encyclopædia*.

I hope my advice was correct, although I did not feel quite all the indifference I professed. One was bitten on the bare foot, the other on the hand among tendons and bones; nor could the precise point be indicated, thus rendering it altogether impossible to have the part removed, without amputating the foot and hand. This I suppose no prudent man would have advised, and in regard to the thousand-and-one certain remedies, the evidence is not of a nature to induce us to place reliance upon any of them. And to have talked of these things without caring to carry them into effect, would merely have tended to increase the anxiety and mental depression, which are prominent symptoms of the disease, and may perhaps occasionally act as an exciting cause—at all events could do no good. I imagine that I did not much exaggerate their chance of immunity, since we only hear, as a general rule, from such as suffer, whilst those who are bitten and escape, are only known for the most part, among their own immediate acquaintances. And Mr. Hunter gives an account of twenty persons bitten by the same animal, only one of whom suffered from the disease. It must, from the above considerations, and from the rarity of the disease, be impossible to estimate, with any probable degree of certainty, the proportion who escape. I should certainly have given a larger estimate in this case if I had thought it would tend more powerfully to allay their anxiety.—*American Journal of Medical Science*, 1851.

MEDICO-METEOROLOGICAL TABLE FOR THE WEEK ENDING MARCH 22, 1851.

THE OBSERVATIONS HAVE BEEN REDUCED TO MEAN VALUES, AND THE HYGROMETRICAL RESULTS HAVE BEEN DEDUCED FROM GLAISHER'S TABLES.

NAMES OF STATIONS.	Latitude.	Longitude.	Height of Barometer above the Level of the Sea.	Mean reading of the Barometer, corrected to 32° Fahrenheit.	Highest Reading of the Barometer.	Lowest Reading of the Barometer.	Range of Barometer Readings.	Mean elastic force of Vapour.	TEMPERATURE OF AIR.				MEAN TEMPERATURE OF AIR.		Mean weight of a cubic foot of Air.	Mean weight of a cubic foot of Air.	Mean amount of Cloud.	AUTHORITIES AND NAMES OF OBSERVERS.					
									Highest.	Lowest.	Range in the Week.	Mean of all the		Mean.					Evaporation.	Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	(Mean depression = 1).
												Mean Daily Range.	Mean of all the											Lowest.	Highest.
Jersey.....	49° 11'	2° 6' W.	Feet. 84	in. 29,553	in. 29,992	in. 28,994	0,998	in. 0,337	61.0	40.0	21.0	57.8	44.3	13.5	50.1	48.7	47.2	5.89	0.41	0.905	7.9	Rev. S. King, F.R.A.S., M.B.M.S.	
Guernsey.....	49° 33'	2° 40' W.	123	29,425	29,839	29,761	1,078	0,335	53.5	43.5	10.0	52.4	46.1	6.3	47.9	47.4	46.8	3.85	0.15	0.964	6.3	Dr. Hoskins, F.R.S., M.B.M.S.	
Truro.....	50° 17'	5° 4' W.	55	29,500	30,000	29,790	1,210	0,305	54.0	42.5	11.5	53.2	44.1	9.1	48.8	46.4	43.7	3.45	0.66	0.937	9.0	Dr. Barham.	
Exeter.....	50° 45'	3° 41' W.	140	29,472	29,860	29,806	1,054	0,310	57.2	37.6	19.6	55.0	41.3	13.7	47.3	46.1	44.6	3.58	0.33	0.915	33.41	Dr. Shapter, M.B.M.S.	
Southampton.....	50° 54'	1° 24' W.	55	29,432	29,831	29,980	0,851	0,302	55.5	38.3	18.7	52.6	43.1	9.5	47.0	45.6	43.9	3.49	0.39	0.901	53.93	J. Drew, Esq., F.R.A.S., M.B.M.S.	
Uckfield.....	50° 59'	0° 5' E.	180	29,418	29,800	29,900	0,680	0,280	56.0	30.0	26.0	51.9	39.0	12.9	44.7	43.4	41.6	3.25	0.35	0.902	53.61	C. L. Prince, Esq., F.R.C.S., M.B.M.S.	
Greenwich.....	51° 29'	0° 0'	160	29,351	29,732	29,540	1,192	0,274	58.4	32.8	25.6	51.9	39.2	12.7	44.9	43.2	40.8	3.25	0.47	0.884	53.16	From Reg-Gen. Report.	
Lewisham.....	51° 28'	0° 1' W.	78	29,424	29,813	29,560	1,253	0,281	59.6	32.5	27.1	52.4	39.1	13.3	44.7	43.4	41.7	3.25	0.35	0.903	53.63	H. Gordon, Esq.	
St. John's Wood.....	51° 32'	0° 11' W.	150	29,392	29,772	29,928	0,744	0,280	57.7	33.0	24.7	51.1	38.9	12.2	44.4	43.2	41.7	3.24	0.32	0.909	53.93	G. Leach, Esq., F.Z.S., M.B.M.S.	
Radcliff Observatory.....	51° 45'	1° 15' W.	210	29,268	29,635	29,561	1,194	0,281	55.8	31.2	24.6	51.4	38.6	12.8	44.0	43.0	41.7	3.25	0.27	0.924	53.41	M. J. Johnson, Esq., M.A.	
Hartwell.....	51° 49'	0° 51' W.	250	29,228	29,630	29,538	0,772	0,286	59.0	32.0	27.0	53.8	37.6	16.2	44.8	43.7	42.3	3.29	0.30	0.931	53.26	Dr. Lee, F.R.S., Treas. B.M.S.	
Cardington.....	52° 7'	0° 25' W.	100	29,407	29,794	29,804	0,990	0,275	55.5	31.8	24.0	51.7	37.7	12.4	43.4	42.4	41.1	3.20	0.24	0.925	53.67	S.C. Whitbread, Esq., F.R.A.S., Pres. B.M.S.	
Norwich.....	52° 37'	1° 16' E.	23	29,503	29,894	29,170	0,654	0,263	56.0	29.0	27.0	50.7	36.0	14.7	43.0	41.7	39.8	3.06	0.35	0.907	54.78	W. Brooke, Esq., F.R.A.S., M.B.M.S.	
Nottingham.....	52° 58'	1° 10' W.	103	29,330	29,780	29,815	0,965	0,261	57.1	31.0	26.1	52.4	35.1	17.3	43.7	42.0	39.8	3.03	0.45	0.872	53.63	E. J. Lowe, Esq., F.R.A.S., M.B.M.S.	
Grantham.....	52° 55'	0° 39' W.	240	29,275	29,691	29,831	0,860	0,263	54.3	30.5	23.8	49.3	35.7	13.6	42.0	41.1	39.8	3.05	0.25	0.922	53.64	J. W. Jeans, Esq., F.R.A.S., M.B.M.S.	
Hawarden.....	53° 11'	3° 2' W.	280	29,125	29,647	29,670	0,977	0,264	52.0	37.0	15.0	48.5	38.8	9.7	41.8	41.0	39.9	3.06	0.19	0.932	53.40	Dr. Moffatt, F.R.A.S., M.B.M.S.	
Liverpool Observatory.....	53° 25'	3° 0' W.	37	29,380	29,994	29,936	0,988	0,252	52.7	39.3	13.4	50.4	41.4	9.6	44.8	42.1	38.6	2.93	0.69	0.909	53.55	John Hartnup, Esq., F.R.A.S.	
Manchester.....	53° 29'	2° 16' W.	144	29,356	29,844	29,914	0,830	0,257	56.0	36.0	20.0	50.2	37.4	12.8	44.2	42.0	39.3	2.97	0.57	0.899	53.58	G. V. Vernon, Esq., M.B.M.S.	
Wakefield.....	53° 41'	1° 30' W.	115	29,303	29,766	29,914	0,872	0,240	56.0	31.5	24.5	51.2	36.5	14.7	43.2	40.7	37.3	2.80	0.63	0.816	53.58	W. R. Milner, Esq., M.B.M.S.	
Stonyhurst.....	53° 51'	2° 25' W.	981	29,004	29,478	29,583	0,895	0,243	53.2	32.6	20.6	49.3	36.4	13.3	42.7	40.6	36.7	2.83	0.53	0.838	53.09	Rev. A. Weld, F.R.A.S., M.B.M.S.	
Whitehaven.....	54° 33'	3° 25' W.	90	29,257	29,748	29,837	0,811	0,261	54.0	35.0	19.0	50.6	39.4	11.2	43.8	42.0	39.6	3.03	0.47	0.865	53.42	J. F. Miller, Esq., F.R.S., M.B.M.S.	
Glasgow.....	56° 51'	0° 18' W.	121	29,277	29,828	29,883	0,940	0,244	51.3	37.3	17.3	48.4	37.2	11.2	42.0	40.2	37.7	2.84	0.47	0.859	53.65	Dr. R. D. Thomson, F.R.S.E., M.B.M.S.	
Dumfries.....	56° 16'	2° 49' W.	280	29,120	29,510	29,700	0,870	0,238	51.0	32.0	19.0	47.0	35.6	11.4	41.4	39.5	36.9	2.77	0.47	0.858	53.45	David Tennant, Esq., F.R.S.E., M.B.M.S.	

The Guernsey observer has to state that the space in which the thermometers are placed does not receive a gleam of sunshine, direct or reflected, except about noon, from the month of November to that of March—the minimum temperature during the summer proves that they are protected from reflected heat during that season. It may be asked, if the minimum temperature in Guernsey be so much influenced, as it is assumed, how is not the maximum similarly affected?—The one thermometer being only an inch or two apart from the other.* The western wall of the garden is upwards of 30 feet, and the eastern house front more than 50 feet from the instruments, which are further protected by intervening shrubs of sufficient height. Dr. Hoskins, from the instruments, which are further protected by intervening shrubs of sufficient height. Dr. Hoskins, perfectly coinciding with the Rev. S. King, as to the meteorological interest of the question admissa, ventures to suggest that, if there be any error, which he doubts, the difference of mean range may depend on too high a

reading of the maximum thermometer in Jersey, attributable possibly to its aspect being E.S.E. (See "The Institute," February 16).

The mean maximum for February in Jersey appears to be 6° above that of Guernsey, for the same month and 7° above that of April on an average of eight years.

The difference between the minimum in both islands is proportionately less, being only 2°7' in favour of Jersey, both of which circumstances will account for the difference of mean daily range.

The highest readings of the thermometer in air were 61°0 at Jersey, 59°5 at Lewisham, and 59°0 at Hartwell.

The lowest readings were 29°0 at Norwich, 30°0 at Uckfield, and 30°5 at Grantham.

The least daily ranges of temperature took place, at Guernsey 6°3, at Liverpool 9°0, and at Truro 9°1; the mean value is 9°1. And the greatest occurred at Nottingham 16°2, and at Norwich 14°7.

* It is believed that both the minimum and maximum thermometere are placed under the shed at Jersey.

WEEKLY MEDICO-METEOROLOGICAL TABLE FOR DIFFERENT PARALLELS OF LATITUDE.

NAMES OF PLACES At Limiting Parallels of Latitude.	Mean Height.	Mean Latitude.	Mean Reading of the Barometer.	Mean Elastic Force of Vapour.	Mean of Highest Read- ings of the Thermometer.	Mean of Lowest Readings of the Thermometer.	Mean Weekly Range of the Thermometer.	Mean of all the Highest Readings of the Ther- mometer.	Mean of all the Lowest Readings of the Ther- mometer.	Mean Daily Range of the Air.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean weight of Vapour in a cubic foot of Air.	Mean additional weight of Vapour required to saturate a cubic foot of Air.	Mean Degree of Hu- midity.	Mean weight of a cubic foot of Air.	Mean amount of Cloud.	WIND.		RAIN.		
																		General Direction.	Average Strength.	Average number of days it fell.	Average fall.	
Truro and Exeter	Feet. 98	50° 31'	in. 29.486	in. 0.308	55.6	40.1	15.5	54.1	42.7	11.4	48.1	44.2	gr. 3.52	gr. 0.50	0.876	533.6	77.	SW. WNW.	1.7	7	2.565	in.
Southampton to Hartwell	155	51° 25'	29.559	0.283	57.4	32.6	24.8	52.1	39.4	12.7	44.9	41.9	3.29	0.35	0.908	534.8	8.5	SW.	1.1	6	1.284	8.5
Cardington to Hawarden	158	52° 46'	29.528	0.265	55.2	31.9	23.5	50.2	36.7	13.5	42.8	41.6	3.08	0.30	0.912	532.2	7.4	SW. SW. SE.	1.4	6	1.192	7.4
Manchester to Stonyhurst	213	53° 40'	29.221	0.247	56.1	33.4	21.7	50.2	36.5	13.5	43.4	41.1	3.08	0.289	0.825	535.8	7.7	SW. SE.	2.0	6	0.969	7.7
Liverpool and Whitehaven	234	54° 59'	29.318	0.257	58.4	37.2	16.2	50.5	40.4	10.1	44.3	42.1	2.98	0.35	0.837	534.9	...	SE. SW.	1.5	5	0.802	...
Glasgow and Dumfries	186	56° 4'	29.139	0.240	51.0	32.9	18.1	47.7	36.4	11.3	41.7	37.3	2.80	0.47	0.858	535.6	...	SW.	..	..	1.095	...

These Tables are copyright, and it is requested that the authority may be given if made use of in contemporary Journals.

The Guernsey observer has to state that the space in which the thermometers are placed does not receive a gleam of sunshine, direct or reflected, except about noon, from the month of November to that of March—the low maximum temperature during the summer proves that they are protected from reflected heat during that season. It may be asked, if the minimum temperature in Guernsey be so much influenced, as it is assumed, why is not the maximum similarly affected?—The one thermometer being only an inch or two apart from the other.* The western wall of the garden is protected by 30 feet, and the eastern house from more than 50 feet from the Instruments, which are further protected by intervening shrubs of sufficient height. Dr. Hoskins, perfectly coinciding with the Rev. S. King, as to the meteorological interest of the question adduce, ventures to suggest that, if there be any error, which he doubts, the difference of mean range may depend on too high a

* It is believed that both the minimum and maximum thermometers are placed under the shed at Jersey, and therefore are not affected by radiation.—Errors.

The mean maximum for February in Jersey appears to be 68° above that of Guernsey, for the same month, and 7° above that of April on an average of eight years.
The difference between the minimum in both islands is proportionately less, being only 2°7' in favour of Jersey, both of which circumstances will account for the difference of mean daily range.
The highest readings of the thermometer in air were 61°0' at Jersey, 59°6' at Lewisham, and 59°0' at Hartwell.
The lowest readings were 29°0' at Norwich, 39°0' at Uckfield, and 30°5' at Grantham.
The least daily ranges of temperature took place, at Guernsey 6°3', at Liverpool 17°3', at Hartwell 16°2', and at Norwich 14°7'; and their mean value is 18°1'.

At JERSEY, there has been rain, more or less, every day this week. We are now paying for the long continuance of fine weather we enjoyed in February. This morning (22nd) it is blowing a heavy gale from S.E. with a splendid sea. The honeysuckle is in flower in sheltered situations, the pear tree in blossom, the furze in its full glory, and everything is considered to be nearly a month earlier than last year.

At GUERNSEY on the 16th clouds and sunshine; light breeze with rain. 17th, the morning, rain; P.M. clear. 18th, cloudy, with strong breeze; P.M. rain, boisterous. 19th, overcast, strong breeze and showers. 20th, clear, A.M.; showers, P.M. 21st, showers. 22nd clouds and strong gale; P.M. overcast, squalls, gale, wind, S.W. The barometer, which had been gradually falling from the 16th, fell to 28.896 on the morning of the 22nd, when the wind veered from S.W. to S.E., from which quarter it blew a strong gale the whole day, the barometer descended to 28.524. At five P.M., the wind returned to S.W. and W., and the gale continued, accompanied by frequent heavy gusts and squalls, but the barometer began to rise rapidly.

At TRURO, 16th A.M., early, fair; after 9 overcast, with a few drops of rainy after 2 P.M., cleared, light wind; towards morning, wind and rain. 17th, A.M., early, rainy, afterwards generally fair, blowing hard. 18th, A.M., early, cloudy, damp; after 10, rainy, chiefly drizzle, blowing fresh; after 2 P.M., fair, cirrus about sunset; night fair, light wind. 19th, A.M., steady rain, light wind; P.M., similar, fresh; cleared about sunset; night fair; light wind. 20th, A.M., showery, dark massy nimbi, with heavy shower and thunder at half-past 11; lightning seen almost immediately before, but thunder was not crashing. 21st, A.M., showery, hail; P.M., showery, night wet. 22nd, A.M., showery day, fresh; evening and night, wet, squally.

At EXETER, 16th, a fine warm day; rain at night. 17th, in the afternoon, high wind from the West. 18th, grey day, slight rain deposit occasionally. 19th, grey rainy day. 20th, thunder, and some hail, at 9 A.M.; grey rainy day. 21st, grey day, with occasional heavy showers. 22nd, heavy rain, till 11 A.M., and after 4 P.M., mid-day fine.

At UCKFIELD, 16th, slight frost early; cumuli and haze; fine night. 17th, frost and fog early; very rainy day; finer at night. 18th, overcast and cold morning; stormy day; fine night. 19th, overcast morning; heavy rain, P.M.; stormy night. 20th, fine morning; showery, P.M.; fine night. 21st, dull morning; brisk wind; showery evening; overcast night. 22nd, overcast and stormy; severe gale and heavy rain in the evening and night; a hurricane just before midnight. The reading of the barometer on the 22nd at 9 P.M. was 28.71; at 11 P.M. it was 28.65; no other reading was taken till 23rd at 9 A.M. when it was 28.91.

At OXFORD, 16th, cloudy, 17th, rain. 18th, rain till 3 P.M.; cleared up after. 19th, overcast; rain during the whole afternoon. 20th, morning cloudy; showery between 3 and 4 P.M. 21st, squally and showery. 22nd, rain nearly all day.

At HARTWELL HOUSE, frost on the 16th, 17th, and 19th. Zodiacal light was very distinct on the 20th. In consequence of the continued rain, the country is flooded. Large quantities of potatoes are already planted. The lambing season has been good.

At CARDINGTON, 16th, misty, sunshine, and clouds. 17th, cloudy, rain. 18th, 19th, and 20th, cloudy and showery. 21st, sunshine and clouds; hail showers; distant thunder at 1 P.M. 22nd was cloudy and showery; the reading of the barometer at 10 P.M. was 28.700 deg. Thunder was heard several times during the night. The lowest reading of a minimum thermometer, on grass, during the week, was 24.0 deg. on the 17th. The highest reading of a maximum thermometer placed in the full rays of the sun, on grass, was 93.0 deg. on the 20th.

At NORWICH, 16th, very light showers in the morning, rest of the day fair. 17th, thick fog in the morning, followed by rain all day; rainbow visible 2 P.M. 18th, overcast during the forenoon; heavy rain P.M. 19th, overcast during the forenoon; heavy rain P.M. 20th, much rain A.M.; P.M. showery. 21st, fair A.M., showery P.M., thunder and lightning at Holt, 20 miles north of Norwich. 22nd, morning clouded.

At LIVERPOOL, 16th, A.M. overcast, thin clouds, clear from 12 to 5; at 5, large and beautiful cumuli in N.E., thin send in the evening. 17th, overcast, with drizzling rain all day; fog on the river Mersey. 18th, morning overcast, steady rain from 8 to 1; a fourth of the sky covered with nimbi and scud during the remainder of the day. 19th, A.M., about one-fifth of the sky covered with cirro-cumuli; P.M., steady rain from 2 to 8, overcast afterwards. 20th, overcast till 6 P.M.; evening generally clear. 21st, heavy clouds and showers throughout the day, with occasional patches of blue sky. 22nd, heavy clouds and drizzling rain generally till 10 P.M.; clear from 10 to midnight.

At STOURBURST, 16th, morning fine, fair; fog till 11 A.M.; hail and rain in showers in afternoon. 17th, fair all day; cloudy; wind cold. 18th, fair till ten A.M., rest of morning rainy; afternoon fair, mild. 19th, morning generally fair; rain all afternoon. 20th, morning very fine and bright; several claps of thunder at five P.M., lightning, and heavy rain. 21st, morning cloudy, fair; showers in afternoon. 22nd, morning fair, cold wind; afternoon rainy.

At GLASGOW, the 16th was fine, with sunshine; the 17th was fine, and rain fell on every other day in the week.

At JERSEY, influenza and colds still very prevalent.

At GUERNSEY, scarlatina declining; no other prevalent disease.

At TRURO, bronchial catarrhs are prevalent. There are some cases of whooping cough.

At EXETER, no epidemics.

At SOUTHAMPTON, in the week ending March 21st, there were 28 deaths—14 males and 14 females, as follows:—

No.	No.
3 Pneumonia.	2 Fever gastro-enteritis.
3 Bronchitis.	1 Diarrhoea.
1 Phthisis.	1 Diseased Heart.
3 Pulmonary Apoplexy.	1 Ramollissement of Brain.
1 Whooping Cough.	1 Apoplexy.
1 Measles.	1 Syphilis (secondary) and epistaxis.
2 Marasmus.	1 Schirrus of Bowels.
1 Scarlet Fever.	8 Old age.

14 males and 14 females registered, 15th to 21st March, 1851.

At UCKFIELD, the prevalent diseases during the week have been whooping-cough, influenza, rheumatic fever, and ophthalmia.

At ST. JOHN'S WOOD, influenza, rheumatism, and measles are still prevailing. Inflammatory affections, especially of the serous membranes, also are more frequent than usual, together with an unusual amount of catarrh and bronchitis.—J. H. ROBERTS.

At HARTWELL, Whooping cough and influenza still continue to prevail, especially among children; several cases have proved fatal. There is still a large amount of disease of the chest, of an inflammatory nature in all classes.

At BEDFORD, No epidemics.

At NORWICH, The state of health in the city the same as last week.

At GRANTHAM, Influenza more prevalent. Measles, diarrhoea, and bronchitis still prevalent, but on the decline. A little pneumonia and ophthalmia. One case of rheumatic fever, two cases of ague, vagrants, the disease not contracted in the neighbourhood of Grantham. One case of intermittent neuralgia, after influenza.

At HAWARDEN, 18th, influenza, three cases; neuralgia, one case; diarrhoea, one, 19th, toothache, one case; neuralgia, one, with conjunctival ophthalmia. 20th, diarrhoea and vomiting, one case (child); premature labour, one; continued fever, two cases, one of one week's standing. Colds general.

At MANCHESTER, In the week ending March 18th, there were 107 deaths, and 133 births; 7 of the deaths were from fever. At Chorlton on Medlock there were 12 deaths and 12 births. At Hulme there were 31 deaths and 40 births; two of the deaths were from fever and one from small pox. At Ardwick there were 7 deaths, and 14 births. At Salford there were 47 deaths, and 51 births; three of the deaths were from fever, one from small pox, and one from measles. At Cheetham there were 6 deaths and 3 births; one of the deaths was from small pox.

At WARFIELD, the influenza is rapidly disappearing, cases of whooping cough are still frequent.

At GLASGOW, influenza and catarrhs still prevalent.

At DUNINO, influenza, croup and bronchitis, are the chief diseases that prevail. The weather during the past week has been bad, the sky has been for the most part cloudy, and rain has fallen at many places on every day. The pressure of the atmosphere has been very variable, the reading of the barometer was highest on Sunday, being nearly 30.00 at the level of the sea; on the 17th, it was about 29.7 at all places; from the 17th to the 18th, it decreased somewhat in the North, and increased to 30.0 in the South of England; from the 18th to the 22nd, it decreased at all places. At Lewisham, on the 23rd, at 1 A.M., the lowest reading reduced to the sea level, 29.50, took place, and after this time the reading turned to increase.

JAMES GLAISHER, F.R.S.,
Secretary of the British Meteorological Society.

MEDICAL NEWS.

HEALTH OF LONDON DURING THE WEEK.

(From the Registrar-General's Report.)

The aggravated rate of mortality in London, which marked the first two weeks of the current month, has prevailed without abatement in the period embraced by the present return. The deaths, which increased to 1247 in the beginning of March, and subsequently rose to 1401, amounted in the week ending last Saturday to 1412. Taking for comparison the ten corresponding weeks of 1841-50, it appears that the highest number was 1,197, and occurred in 1845 (in a week when the mean temperature had fallen about ten degrees lower than usual), and that the average mortality was 997. This average, if corrected according to the supposed rate of increase in the population, amounts to 1088; and the increase above it exhibited in last week's return is 324.

The sickness which now prevails is common, as already shown, to all periods of life; but it deserves notice, that whereas the total mortality returned in either of the last two weeks is nearly the same, the deaths of young persons under 15 years shows a decrease from 593 (in the week ending 15th March) to 566 last week, while those which occurred in the middle period of life rose from 442 to 456, and those in the still more advanced stage (or above 60 years) rose from 365 to 390.

NAVAL APPOINTMENTS.

Surgeon William Lindsay, M.D. (1843), Deputy Medical Inspector of the Naval Hospital at Malta, to be Deputy Medical Inspector at the Royal Hospital, Haslar, *vice* Allan, deceased. John Stewart, M.D. (1845), to be Deputy-Inspector at Malta Hospital, *vice* Lindsay, appointed to Haslar Hospital, Portsmouth. Surgeon-Superintendent John W. Elliott (1838), to the Bride hired convict ship.

Assistant Surgeons—Alexander Robertson (1841), and George B. Moore (1850), to the Queen, 116, flag-ship on the Mediterranean station; George T. Jones and Philip W. Govett (1850) to the Southampton, 50, flag-ship on the south-east coast of America station; Henry Slade (1847) to the Castor, 36, at the Cape of Good Hope station; James Sproule (acting) to the Victory, flag-ship at Portsmouth.

APOTHECARIES'-HALL.

The following are the names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 20th, 1851:—Samuel Gamble, Newmarket; Henry Wiglesworth, Newbury; Andrew Bolton, Durham.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 21st inst.:—Messrs. James Strange Biggs, Devizes, Wiltshire; Charles Nairne, Lambeth; Moses Morgan, Banbury, Oxfordshire; Charles William Goodall, Nornanton-on-the-Wolds, Nottinghamshire; George William Pettinger, Sutton-upon-Trent, Nottinghamshire; Constantine Holman, Hurstpierpoint, Sussex; William Henry Gatty, Market Harborough, Leicestershire; George Earle, Beverley, Yorkshire; William Andrews Rogers, Stanmore, Middlesex; Thomas Fuller, Brighton, Sussex; and Edward Robert Bickersteth, Liverpool. At the same meeting of the Court Mr. Henry Wellings passed his examination for naval surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date August 3, 1846.



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Printed by SYDNEY HEDLEY WATERLOW, of Gloster-terrace, Hoxton, in the county of Middlesex, at the printing-office of Messrs. WATERLOW and SONS, 65, London Wall, in the city of London, and published by THOMAS MARTIN, at the Office, East Temple Chambers, Whitefriars-street, in the precinct of Whitefriars, in the city of London.—Saturday, March 29th, 1851

